

# **Brief on Estimated Sample Size of Women Needed to Result in 100,000 Live Births**

**Revised Version: June 15, 2004**

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## **I. INTRODUCTION**

The number of women that need to be contacted and recruited to obtain the desired sample size for the National Children's Study (NCS) is a significant factor in determining the cost and feasibility of various sampling approaches being considered. In this report we estimate the number of women and households that need to be contacted and enrolled in the NCS in order to obtain 100,000 live births under different assumptions regarding response and fertility rates. To do so, we developed probabilistic models to predict recruitment, enrollment, and live births resulting for a series of possible protocols for conducting the recruitment effort. We utilized various data sources for estimating probabilities including the October 25, 2002 Westat report titled "Sampling Strategies for the Proposed National Children's Study," the Battelle White Paper on Recruitment and Retention for the NCS, and various additional sources of data including the National Vital Statistics Reports (NVSr), the National Survey on Family Growth (NSFG), and other research studies.

## **II. METHODOLOGY**

We considered two primary recruitment strategies separately – recruitment through a probability-based sample of households and recruitment of women through medical offices such as obstetrics or family planning practices in which some prior knowledge regarding patients is available. We also considered a third option of recruiting entire communities, the results of which we estimated to be a combination of the household and physician's office approaches. Within each strategy, we considered multiple levels of three primary criteria to evaluate their impact on the required sample size.

- ***The length of recruitment period*** – Enroll all live births within a window of three, four, or five years.
- ***The pregnancy/contraception status of age-eligible women*** – For the household recruitment model, one option enrolled all age-eligible women and the other enrolled only those currently pregnant (CP) or currently seeking pregnancy (CSP) at the initial contact. For the Physician's Office Model, we considered one option in which 80,000 live births would stem from women currently pregnant at initial contact and the remaining 20,000 from women seeking to become pregnant at initial contact. We also explored a second option using the Physician's Office Model that divided the 20,000 births that come from women not pregnant at enrollment among women seeking pregnancy at initial contact and women either avoiding pregnancy at initial contact [i.e., current contraception users (CCU)] or women not on contraception but not seeking to become pregnant (e.g., not sexually active).
- ***Initial enrollment rate*** – We considered two levels of average initial enrollment rates - 60 and 80 percent. The Westat 2002 report estimated 80 percent based on results

from the NSFG and the National Household Survey of Drug Abuse, but given the length and burden of the NCS, it is possible that response rates may not reach this level. Thus, we present results for a 60 percent enrollment rate to judge the impact this has on required sample size of women. Factored into the average enrollment rates is an assumption that CP or CSP women have higher enrollment rates than women not seeking pregnancy – 85 vs. 79.5 percent for the 80 percent average, and 65 vs. 59.5 for the 60 percent average.

In calculating the number of women initially enrolled, we used estimates for a number of intermediate response/participation rates that we held constant across all recruitment options. These include:

1. ***Age of women in population*** – A smoothed distribution of women in each monthly age group from 15 to 44 years old was calculated using Census 2000 data. For this estimation exercise, births are only accepted from women who are less than 45 years old, i.e., women are dropped from the process when they reach age 45 in the calculations that follow so that all births occur to women who are in the target age range at delivery.
2. ***Unit Occupation Rate*** - 90 percent of sampled households occupied, used for household recruitment only;
3. ***Initial Contact Rate*** - 95 percent of sampled households/women are able to be contacted, with initial eligibility information obtained;
4. ***Pregnancy/Contraception Status of Sampled Women*** – Based on the 1999 NVSR, we estimated that there will be 99.9 pregnancies per 1,000 women in a year across all women from 15-44 years old. Also, based on the NSFG (1995), we estimated that, at a given time, 4.0 percent of women are actively seeking pregnancy, 64.2 percent are CCUs, and the remainder that are not already pregnant are not on contraception but are not actively seeking pregnancy. These rates vary by age group. From these, we estimated age-specific rates for each monthly age group, which we used in the probabilistic model.
5. ***Attrition rate*** – We assumed that a fraction of women being tracked would drop out of the study each month over the recruitment/follow-up period. We targeted an average monthly attrition rate of .003, which amounts to approximately 9.5 percent, 12.7, and 15.8 percent attrition for the three, four, and five year recruitment periods, respectively. This accounts for the sample being enrolled uniformly over a 12 month period, and women who reached age 45 being dropped out of the study (regardless of their pregnancy status at the time). Additionally, we allowed the attrition rate to be different depending on pregnancy/contraceptive status with women who are currently pregnant or currently seeking pregnancy having a higher likelihood of staying in the study than women using contraception or not seeking pregnancy.
6. ***Induced Abortion and Fetal Loss Rates*** – Based on NVSR 1999 data, we estimate that 20.5 percent of pregnancies end in induced abortion and 15.9 percent end in a fetal loss with the remaining ending in live births. We utilized a smoothed curve of age-specific rates generated from the NVSR data. Fetal losses are distributed from the second through the ninth month of pregnancy with 60 percent assumed to occur in Month 2.<sup>1</sup> Women undergoing a fetal loss then move back into the contraception status that they were in

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<sup>1</sup> It should be noted that the data sources used to develop this probabilistic model correspond to pregnancies that are recognized by pregnant women. Therefore, all spontaneous abortions that occur prior to week four of pregnancy (which are usually not recognized by the woman) are excluded from this model.

prior to becoming pregnant. Using data from CDC's 2000 Abortion Surveillance report, we distributed the occurrence of induced abortions from the second month through the sixth month of pregnancy. Following an induced abortion, these women are then shifted into the group of women on contraception.

In reality, we would not expect the probability of induced abortion to be the same for enrolled pregnant women or enrolled women seeking pregnancy as for the general population of women; however, our pregnancy model at this point does not differentiate between contraception status group of origin when removing women for induced abortion. Thus, the estimates developed for those recruitment options enrolling only already pregnant women or those seeking pregnancy are conservative. Based on calculations presented in Appendix A, we determined that a sampling strategy that exclusively recruited women in the CP and CSP categories would yield approximately 26.5 percent more live births because this group would not pursue induced abortions. A "correction factor" was applied to all sampling approaches considered that oversampled the CP/CSP categories based on this calculation. The overall results presented in Table 1 reflect the application of this correction factor to the recruitment options not targeting all women. The results presented in the Appendices do not reflect this correction factor.

7. **Live Birth enrollment rate** – Of live births eligible for the study (1<sup>st</sup> or subsequent), we assume that 94 percent are enrolled in study. Note that currently-enrolled women who experience a live birth event but do not enroll the child are dropped from the study at that point.
8. **Multiple birth multiplier** - An age-specific multiplier was calculated and applied to both 1<sup>st</sup> and subsequent study births to account for twins, triplets, etc. The multiplier ranged from 1.0082 to 1.0297 across the six primary age-groups, however our model utilized age-group specific rates that were smoothed across all ages by month.

To generate pregnancy and live birth rates for the group of enrolled women, we developed a transition model that estimated the rates at which women move between four basic pregnancy/contraception status categories – CP, CSP, CCU, and Other (not on contraception, not seeking pregnancy, and not pregnant). This transition model is based on maintaining age-specific probabilities of being in the various categories. We attempted to mimic what would really happen as enrolled women age over the recruitment period and face varying probabilities for being in different pregnancy/contraception categories as they move through time. In the enrollment cohort, without accounting for transition, women in the CSP category are quickly depleted, as a large percentage of those actively seeking to become pregnant are successful each month (e.g. 30 percent of 20 year-olds seeking pregnancy will be successful each month). The transition model accounts for the ongoing shift of women from the CCU and Other categories into the CSP category at a rate that maintains a steady population in the CSP category over time (2 percent of enrolled 20 year-old women). Women transition from the various categories into the CP category at a rate that maintains the annual pregnancy rates from the 1999 NVSR data. The percentage of all pregnancies originating from the CSP group is based on NSFG data on the percentage of pregnancies that are Intended. The distribution of pregnancies from the CCU and Other groups is based on NSFG results on the percentage of Mistimed and Unwanted pregnancies, the two types of Unintended pregnancies. See Appendix A for more details on our methodology for developing pregnancy and live birth rates.

For this exercise, we assumed that all live births would be obtained in the window of time indicated by the recruitment period, e.g., in a four year recruitment period all live births would arrive within the range of Months 4 to 51 – a 48 month window. This assumes that any births that occur in the first three months after enrolling an already-pregnant women are not eligible for enrollment in the study, i.e., these represent women in their third trimester of pregnancy at enrollment. An exception to our standard initial enrollment period of 12 months is the currently pregnant population enrolled throughout a longer period of time in the Physician's Office Model. Whereas in the Household recruitment approach we assume that all women are enrolled during the first 12 months of the recruitment period, in the Physician's Office recruitment approach we assume that the currently pregnant women are enrolled throughout the recruitment period. Because all births must be delivered by the end of the recruitment period and a fraction of women enrolled while currently pregnant are placed in their first month of pregnancy, we allow currently pregnant women to be enrolled up through Months 29, 41, and 53 of the three recruitment periods, respectively, in the Physician's Office recruitment approach.

### **III. ESTIMATES OF NUMBER OF CONTACTS NEEDED FOR 100,000 LIVE BIRTHS**

Table 1 displays estimates of the initial number of households or women that need to be targeted, the expected number of women contacted, and the number of women enrolled in order to obtain 100,000 live births in the specified recruitment period. Note that in the household model, the number of households targeted is much larger than the number of women contacted as it accounts for household vacancies, failed contacts, and the expected number of eligible women per household. The estimates of number of women targeted by the Physician's Office approach, however, are much lower as this approach assumes that the physicians allow the study to identify eligible women from their patient lists based on their age and contraception status. Comparing the four year household recruitment numbers between the two groups of women targeted, although over twice as many households have to be initially targeted for contact when women not seeking pregnancy are ineligible for enrollment, about 77 percent fewer women are actually enrolled (113,990 vs. 504,510) and tracked to obtain 100,000 enrolled live births.

The initial enrollment rate, the length of the recruitment period, and the pregnancy/contraception status of women targeted for enrollment impact the estimates significantly. Across all recruitment options, estimating an average 60 percent rate for initially enrolling women in the study instead of an 80 percent rate while holding all other variables constant increases the estimated number of households/women targeted by approximately one-third. In the household approach, the increases are 32.5 percent and 30.8 percent for the all women and CP/CSP only options. Because we thought it possible that CP/CSP women may have a significantly higher initial enrollment rate than the other women, we investigated an alternative option with a combination of the .85 rate for CP/CSP women and the .595 rate for CCU/Others. For the three year recruitment period, this option estimated very close to the average number of households targeted of the comparable 60 percent and 80 percent options. See Table F1 in Appendix F for the detailed results of the alternative option.

**Table 1. Summary of Number of Households/Women That Need to be Targeted, Contacted, and Enrolled in the Recruitment Process to Obtain 100,000 Live Births**

Enrolled in the Recruitment Process to Obtain 100,000 LIVE Births					
Sampling Approach	Pregnancy Status of Women Targeted	Initial Enrollment Rate	# of Households/ Women Initially Targeted	# of Women Contacted	# of Women Enrolled
3-Year Recruitment Period					
Household	All	80 %	1,741,434	848,688	679,345
		60 %	2,304,195	1,122,949	674,291
	CP & CSP	80 %	3,053,322	1,488,036	125,672
		60 %	3,992,806	1,945,894	125,672
Physicians' Offices	80% CP, 20% CSP	80 %	157,040	149,188	126,810
		60 %	205,359	195,092	126,810
	80% CP, 10% CSP, 10% CCU/Other	80 %	278,609	264,678	217,451
		60 %	368,430	350,009	217,451
4-Year Recruitment Period					
Household	All	80 %	1,293,263	630,272	504,510
		60 %	1,714,209	835,420	501,640
	CP & CSP	80 %	2,769,487	1,349,710	113,990
		60 %	3,621,637	1,765,005	113,990
Physicians' Offices	80% CP, 20% CSP	80 %	146,398	139,079	118,217
		60 %	191,444	181,871	118,217
	80% CP, 10% CSP, 10% CCU/Other	80 %	219,908	208,913	172,696
		60 %	290,227	275,716	172,696
5-Year Recruitment Period					
Household	All	80 %	1,045,711	509,627	407,939
		60 %	1,387,466	676,181	406,023
	CP & CSP	80 %	2,559,866	1,247,551	105,362
		60 %	3,347,517	1,631,412	105,362
Physicians' Offices	80% CP, 20% CSP	80 %	138,226	131,315	111,617
		60 %	180,757	171,719	111,617
	80% CP, 10% CSP, 10% CCU/Other	80 %	210,444	199,922	165,212
		60 %	277,767	263,878	165,212

Within the household model, extending the recruitment period by one year from three years to four years reduces the estimated number of households sampled by 26 percent when all women are targeted and 9 percent when only CP and CSP women are targeted. Similarly, extending the recruitment period by two years (from three to five years) reduces the estimated household sample size by 40 percent when all women are targeted and 16 percent when only CP or CSP women are targeted. Within the physician's office model, extending the recruitment period from three years to four years reduces the estimated number of women targeted by 6.8 percent when only CP or CSP women are considered and 21 percent when all women are targeted (in the proportions cited in Table 1). Likewise, extending the recruitment period from three years to five years reduces the estimated size of women targeted by 24.5 percent when all women are targeted and 12 percent when only CP or CSP women are targeted.

We explored an additional recruitment option that represented a *full community approach* in which the study attempts to enroll all women from pre-selected geographic areas. In this option, 50,000 births originated from a group of women who are assumed to initially self-contact or

volunteer for the study after an aggressive advertising campaign and who are enrolled over the first six months of the recruitment period, and another 50,000 births originated from a group of women contacted via door-to-door visits in Months 7 through 12. Higher initial enrollment rates were assumed for the women who take the initiative to contact the study. For the door-to-door sampling that occurs after the self-reporting women are enrolled, a lower rate of women per household (.40) is utilized to account for the fact that many households with age-eligible women from the community have already been identified. The results of this full community approach are similar to those found in the household recruitment approach, with fewer households having to be targeted (2.5 percent less) and fewer women contacted (4.8 percent less), but slightly more women needing to be enrolled (0.5 percent). See Appendix A for more details on this approach and Appendix F for the detailed results of the approach.

When interpreting these estimates, users should keep in mind the many assumptions that fed into the results. For example, in the case of the Live Birth Enrollment rate, we used the 94 percent estimate for enrolling of infants upon birth developed in the Westat 2002 report; however, that report cited that this rate “may be somewhat optimistic and can probably only be met if the exam places very little burden on the mothers.” Additional analyses using the five-year, household recruitment approach as an example revealed that decreasing the Live Birth Enrollment rate from 94 to 90 percent increases the estimate of number of women needing to be contacted by 5.1 percent, and decreasing the rate to 80 percent increases the estimate by 20 percent.

#### **IV. AMOUNT OF PRE-PREGNANCY INFORMATION AVAILABLE**

Another important outcome of the recruitment is the amount of pre-pregnancy information that could potentially be obtained. Because there is not a targeted minimum number of live births for which pre-pregnancy information should be gathered, we cannot make specific statements regarding the number of women from which pre-pregnancy measures would have to be collected. The models for estimating the number of women contacted and enrolled, however, do reveal the number of women in the various recruitment strategies for which pre-conception measures will be available. These include women enrolled prior to pregnancy and women enrolled already-pregnant who can be tracked following enrollment of a first child. Table 2 reports these data for a four-year recruitment period, as well as the number of live births resulting from women able to be tracked pre-pregnancy. Note that not all women who enroll a first birth are considered available for a second pregnancy, as conceptions need to be identified by ten months prior to the end of the window for obtaining live births. Using the four year recruitment as an example, we estimated that 75 percent of first enrolled study births from the CSP, CCU, and Other groups would occur in time for the women who gave birth to be available for second pregnancy tracking. Similarly, within the Physician’s office model, we estimated that 75 percent of first enrolled births by women who were already pregnant would be delivered in time for the women to be available for preconception measures on a second pregnancy. A higher yield would be achieved if the women available for second pregnancy tracking were only those who delivered their first child earlier in the study, such as within the first 30 or 36 months.

**Table 2. Preconception Information Available, Four Year Recruitment**

Sampling Approach	Women Targeted	Women Available for Preconception Measures		Women Tracked for a Second Pregnancy	
		# of Women Available	# of Births Resulting	# of Women Available	# of Births Resulting
Household	All	494,420	77,177	73,084	8,486
	CP/CSP	105,116	38,175	79,191	13,152
Physician's Offices	All (80/10/10)	146,973	26,662	67,686	8,200
	CP/CSP (80/20)	86,184	26,662	67,410	8,540

In the household recruitment approach targeting all women and following them over the four-year period of recruitment, 15.6 births result from each 100 women available for pre-conception measurement (77,177/494,420 from Table 2). When women not seeking pregnancy are excluded from enrollment, the rate of births resulting from women available for pre-conception measures increases to 36.3 per 100. This increase is from the larger percentage of births from women seeking to become pregnant at enrollment. The rates are similar in the Physician's Office Model – 18.1 per 100 when all women are included in the enrollment and 30.9 per 100 when women not seeking pregnancy are excluded. Focusing just on the women who enroll a first child in the study and have sufficient time to conceive again in the recruitment period, we see lower rates of live births resulting – 11.6 and 16.6 per 100 from the household approaches targeting all women and CP/CSP women, respectively; and 12.1 and 12.7 per 100 for the comparable groups of targeted women under the Physician's Office Model.

**APPENDIX A**  
**DETAILS ON THE PROBABILISTIC MODELS USED TO GENERATE ESTIMATES**  
**OF THE SAMPLE SIZE OF WOMEN NEEDED FOR 100,000 LIVE BIRTHS**

**I. INPUTS TO PROBABILISTIC MODELS**

***Recruitment Guidelines***

Study recruitment parameters that could vary include:

- Age-eligible women – The age range of the population of women targeted for recruitment could change. For purposes of this exercise, we assume that the population of interest for initial recruitment is women aged 15 to 44 years old. We assume that women are dropped from the study as they reach 45 years of age.
- Pregnancy Status – Should all age-eligible women be recruited or should recruitment focus on women already pregnant or those seeking to become pregnant? Because women currently on contraception or not trying to become pregnant will have lower conception rates and a larger percentage of those who do conceive may terminate the pregnancy, this population will yield fewer live births. On the other hand, women in this group may display different pre-conception and early pregnancy behavior and encounter different environmental influences, thus their involvement in the study would be beneficial. For this exercise, we model options where all women are enrolled regardless of current pregnancy/contraception status and options where women not seeking pregnancy are excluded.
- Length of recruitment period – The length of both the initial contact period and the full recruitment period impacts the number of live births that result. For purposes of this report, we assume that initial enrollments will occur uniformly over a one-year period (except current pregnancies in the Physician's Office Model) and that the full recruitment period is either three, four, or five years plus three months. All live births would occur in a three, four, or five year window of time beginning with the fourth month of the recruitment period. In the Physician's Office Model, already-pregnant women can be enrolled through Months 29, 41, and 53 under the three timeframes, respectively. This provides women in their first month of pregnancy at enrollment with sufficient time to deliver by the end of the recruitment period.

***Initial Recruitment and Follow-up Rates***

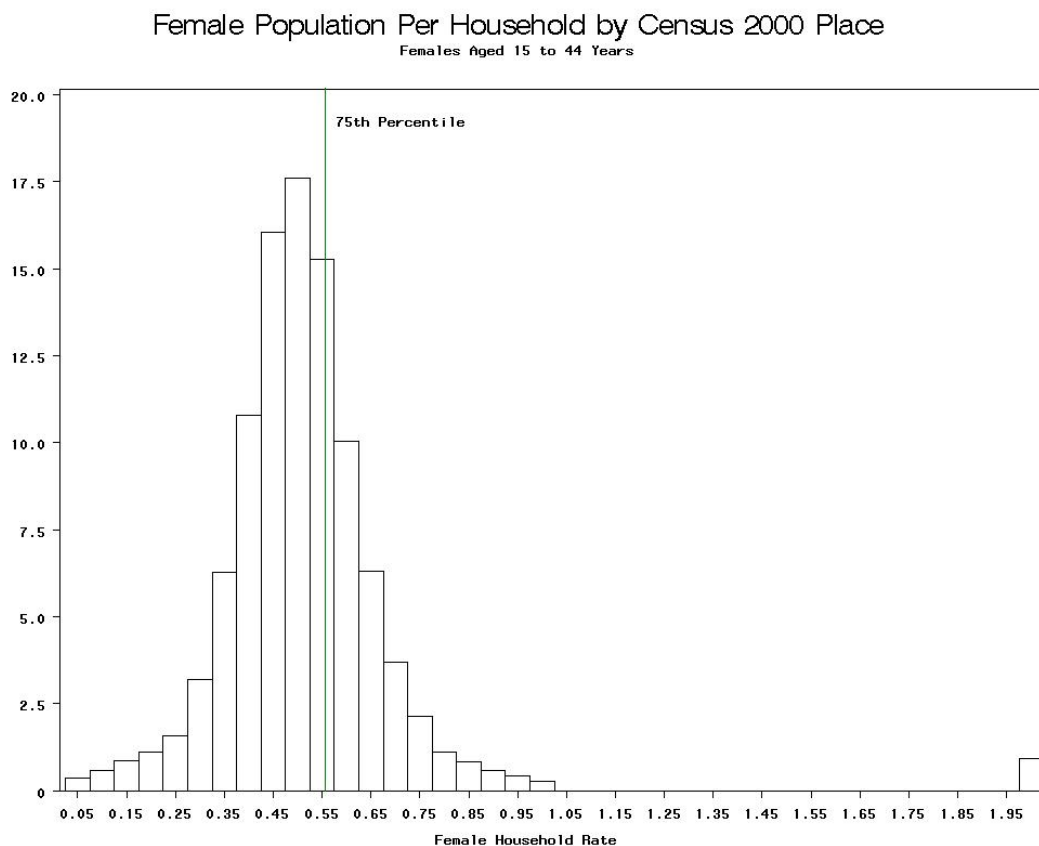
There are a number of recruitment stages at which sampled women could be lost. We estimated probabilities for each stage.

- Occupancy rate – Westat (2002) gives the occupancy rate of households being surveyed as 88 percent. The U.S. Decennial 2000 Census shows that there are 105,480,101 occupied units out of a total of 115,904,641 Housing Units. This puts the occupancy rate closer to 91 percent. We chose to assume an occupancy rate of 90 percent, which we held constant across all household recruitment options.
- Contact rate – There will be sampling loss from inability to contact or screen people in the households targeted for sampling. The 2002 Westat report utilized a general household contact rate, or screening response rate, of 95 percent. The Westat report mentions that 95 percent is possible if information from neighbors is used to determine presence of age-eligible women in households unable to be contacted directly. For this



exercise, we assume that a 95 percent contact rate is possible given enough return visits, although lower rates may need to be considered if the cost of obtaining the 95 percent rate is determined to be too high.

- Age eligible women per Household - Census 2000 data reports that there are approximately 568 15-44 year old women per every 1,000 households. For this exercise, we used a rate of .57 per household. A suggestion for being able to achieve a higher rate is to potentially assign certain geographic areas with higher rates of age-eligible women per household higher weights for sampling in order to achieve a higher yield; however, review of Census 2000 data at the Place level (24,047 small towns, cities, villages, etc.) indicates .57 is at the 78<sup>th</sup> percentile of the distribution of age-eligible women per household (Figure 1 displays the distribution). Thus, it may not be reasonable to expect to achieve a rate much higher than .57.



**Figure 1. Distribution of Number of 15-44 Year Old Women Per Household by Census Place**

- Initial Enrollment Rate – Of the eligible women successfully contacted, not all will agree to participate, especially given the long-term nature of the study and potentially invasive sampling and questions. Westat (2002) assumed this initial enrollment rate, or commitment to respond in the next 3-5 years if conception occurs, to be 80 percent. This is comparable to a couple of past studies. The first is NSFG Cycle III (1982) which was also an extended response interview situation. Cycle III achieved a response rate of 83.5 percent. (see Bachrach et al., 1985) Note that the current Cycle VI is not available, and Cycle IV (1988-90) and Cycle V (1995) were sub-samples of NHIS, making comparisons

to more recent NSFG Cycles inappropriate. The other extended interview survey to which this enrollment rate can be compared is the National Household Survey of Drug Abuse (NHSDA), performed between 1993 and 1998. Sample response rates varied between 77-81 percent for the NHSDA (see Chromy et al, 1999). It may be inappropriate to compare to either NSFG or NHSDA since a woman may not be as likely to commit to an extended interview type of survey as they are to enroll in an extended interview situation which also requires medical testing, etc. For this exercise, we targeted two levels of average initial enrollment rates – 80 percent as the higher bound and 60 percent as the lower bound. We also assumed that higher enrollment rates would be achieved with CP and CSP women than with the other two groups not seeking pregnancy. In the 80 percent model, estimated enrollment rates of CP and CSP women are set at 85 percent while enrollment rates for CCUs and Others are set at 79.5 percent, resulting in the 80 percent average. Similarly, in the 60 percent average enrollment rate option, the two levels are set at 65 and 59.5 percent.

- Attrition Rate - There will also be attrition of women between initial enrollment and the end of the recruitment period. This attrition could come at any time - prior to a first study pregnancy, during a monitored pregnancy, or after enrolling a first child in the study. In general, we targeted a 10 percent attrition rate over the three-year recruitment period. Additionally, we assumed that CP and CSP women would be less likely to drop out of the study because they are more involved in it and are more likely to actually be receiving benefits from participating, whereas women not seeking to become pregnant might feel less attachment to the study. To address this assumption, we set the monthly attrition rate for CP and CSP women to .0015 and for CCU and Other women to .0035. Over a three-year recruitment period, this amounts to approximately 4.8 and 10.8 percent attrition rates, respectively, with a weighted average of approximately 10.1 percent. The four-year and five-year recruitment options yielded overall attrition rates of approximately 13.6 and 16.9 percent, respectively. For the recruitment options enrolling only CP and CSP women, the four and five year attrition rates were approximately 6.5 and 8.1 percent. Additionally, women who reached age 45 were dropped out of the study. The percent of the women dropped over the course of the follow-up period for this reason ranges from approximately 6.4 percent in the three-year recruitment to 17.5 percent in the five-year recruitment.

### ***Pregnancy Prevalence***

Regarding the calculation of enrolled pregnant women, there are a number of factors we had to consider – pregnancy and/or contraception status at enrollment, rate of movement between pregnancy/contraception status categories over time, pregnancy rate for each contraception status group, and induced abortion and fetal loss rates for enrolled women.

To estimate the percent of women that will be pregnant when initially contacted for the study (P1), we used the 1999 CDC National Vital Statistics (see Ventura et al, 2003) reporting number of pregnancies, live births, induced abortions, and fetal losses by age group. These data are shown in Table A1. A kernel smoothing algorithm was used to estimate the number of live-births, fetal losses, and induced abortions for each year-month age-category. For each age group, we calculated the percentage of women expected to be pregnant based on the number of live births, fetal losses, and induced abortions expected to occur over the next 10 months (six months

for abortions). Applying that assumption to the 25-29 year old group as an example, we calculated that 10.33 percent of women in this age group would be pregnant upon enrollment.

**Table A1. Pregnancy, live birth, induced abortion, and fetal loss rates (per 1,000 women) by age for 15-44 year olds, 1999**

Pregnancy Outcomes	Total	Age of Woman					
		15-19	20-24	25-29	30-34	35-39	40-44
All Pregnancies	99.9	86.7	176.2	166.6	126.6	63.8	14.4
Live Births	63.5	48.8	107.9	111.2	87.1	37.8	7.8
Induced Abortions	20.5	24.7	46.4	31.7	18.3	9.7	3.2
Fetal Losses	15.9	13.2	21.8	23.7	21.3	16.3	3.3

Source: National Vital Statistics Reports, Vol. 52, No. 7

To distribute the remaining non-pregnant women into groups based on their contraception status, we used data from the 1995 NSFG (see Table A2) in combination with the calculated currently pregnant rates. Percent of women seeking pregnancy (P2) and percent currently using contraception (P3) were taken directly from the data in Table A2. The percent of women not using contraception (P4) but not seeking to become pregnant was calculated as 1-P1-P2-P3.

**Table A2. Percent distribution of women 15-44 years of age by current contraception status according to age at interview, US, 1999**

Contraceptive Status	Total	Age of Woman					
		15-19	20-24	25-29	30-34	35-39	40-44
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Using contraceptives	64.2	29.8	63.4	69.3	72.7	72.9	71.5
Not using contraceptive	35.8	70.2	36.6	30.7	27.3	27.1	28.5
Seeking Pregnancy	4.0	0.9	3.4	6.1	6.2	4.6	2.2

Source: NSFG, Series 23, No. 19, Table 41

The information in Tables A1 and A2 allow us to categorize women by their pregnancy or contraception status at initial enrollment. A complicating factor in estimating pregnancy rates for each category of women, however, is that over time the enrolled women will move between categories. Thus, had we estimated a very high conception rate for those women who are CSP at enrollment and a relatively low rate for women who are CCUs at enrollment and held those constant, we would not have reflected the fact that over time women do change categories. To account for the expected movement of women between contraception-status categories, we developed a transition matrix for each age group to better predict pregnancies that would result over time from the initial group of enrolled women.

An additional input utilized by the transition matrices is the percent of pregnancies identified as “intended,” i.e., those attributable to women seeking pregnancy, which also is available from the 1999 NSFG. Table A3 reports the percent of pregnancies identified as Intended, Mistimed, and Unwanted by age group. We used these data to establish the number of new pregnancies that would originate from the group of women in the CSP category. To distribute “unintended” pregnancies (i.e., Mistimed + Unwanted) between the CCU and Other contraception groups, we considered contraception failure rates, but use of published failure rates were inconsistent with the number of pregnancies identified as unintended by the NSFG. Thus, we made a simplifying assumption that Unwanted pregnancies originate from CCUs and Mistimed pregnancies originate

from the Other category, those not on contraception but not seeking pregnancy. Sensitivity analyses were performed to assess the impact of allowing 25 to 50 percent of Mistimed pregnancies to originate from the CCU category. These analyses revealed that this assumption had minimal impact on the results corresponding to the number of women that need to be contacted and enrolled for the study (<.1 percent change when attributing either 25 or 50 percent of Mistimed pregnancies to the CCU group).

**Table A3. Percent distribution of births to women 15-44 years of age by wantedness status at conception, US, 1999**

Wantedness Status	Total	Age of Woman			
		15-19	20-24	25-29	30-44
Total	100.0	100.0	100.0	100.0	100.0
Intended	69.0	34.3	61.1	77.8	80.1
Mistimed	21.6	54.5	30.9	13.3	9.7
Unwanted	9.1	10.6	7.7	8.9	9.8

Source: NSFG, Series 23, No. 19, Table 14

Table A4 illustrates the conceptual transition matrix developed to estimate movement between contraception status categories from Month  $m$  to Month  $m+1$ . Each cell represents the probability of being in a particular pregnancy/contraception status given that a woman was in another specified category the previous month. For example,  $P_{11}$  is the probability of being pregnant in Month  $m+1$  given that a woman was pregnant in Month  $m$ . A general principle supporting the use of this matrix is that the group of women currently seeking pregnancy is constantly refreshed from women previously in the CCU or Other categories so that the percentage of women trying to become pregnant remains stable. Likewise, the conditional probabilities depicted in Table A4 were calculated in a manner that maintains the age-specific probabilities of being in the CP, CSP, CCU, and Other categories. Thus, our approach yielded 360 unique transition matrices (one for each month of transition from age 15 to 45 inclusive). We assumed that the age-specific marginal probabilities of being in all four categories (CP, CSP, CCU, and Other) would remain relatively stable in the U.S. population over the relatively short period of time (three to five years) for which the pregnancy model was estimating pregnancy/contraception status for the NCS (i.e. that the population demographics estimated based on current data will be reasonably accurate for the period when recruitment for the NCS initiates).

**Table A4. Conceptual Pregnancy Status Transition Matrix, Month  $m$  to Month  $m+1$**

Pregnancy/ Contraception Status, Month $m+1$	Pregnancy/Contraception Status, Month $m$			
	CP	CSP	CCU	Other
CP	$P(CP_{m+1} CP_m)=P_{11}$	$P(CP_{m+1} CSP_m)=P_{12}$	$P(CP_{m+1} CCU_m)=P_{13}$	$P(CP_{m+1} Other_m)=P_{14}$
CSP	$P(CSP_{m+1} CP_m)=P_{21}$	$P(CSP_{m+1} CSP_m)=P_{22}$	$P(CSP_{m+1} CCU_m)=P_{23}$	$P(CSP_{m+1} Other_m)=P_{24}$
CCU	$P(CCU_{m+1} CP_m)=P_{31}$	$P(CCU_{m+1} CSP_m)=P_{32}$	$P(CCU_{m+1} CCU_m)=P_{33}$	$P(CCU_{m+1} Other_m)=P_{34}$
Other	$P(Other_{m+1} CP_m)=P_{41}$	$P(Other_{m+1} CSP_m)=P_{42}$	$P(Other_{m+1} CCU_m)=P_{43}$	$P(Other_{m+1} Other_m)=P_{44}$
Marginal Total	1.0	1.0	1.0	1.0

To reflect appropriately-timed live birth, fetal loss, and induced abortion rates by dropping women out of the currently pregnant category at different points in time during pregnancy, the

CP category was separated into 10 subgroups representing the ten months of pregnancy. Individual probabilities were developed for moving women from each month of pregnancy to the next. We made a number of assumptions in order to develop probabilities for each transition matrix. These assumptions include:

1. Fetal losses occur from the second to the ninth month of pregnancy. Women suffering a fetal loss will move from the relevant monthly CP group in Month  $m$  to the group they originated from prior to pregnancy. We did not attribute any fetal losses to the first month of pregnancy because we assume that most of the Month 1 fetal losses would not be recognized as a pregnancy by the woman. We did not have data on which to develop age-specific distributions of fetal losses over month of pregnancy. Using a few different references, we used a distribution of 60, 25, 10, 3, .5, .5, .5, and .5 percent across the eight months of pregnancy from which fetal losses are taken. (Hoesli et al. 2001, Macklon et al. 2002, Simpson 1990) Note that changing this assumption to a more simple assumption that all fetal losses occur in the first month of pregnancy has only a minor effect on results, e.g., requiring .05 percent less women to be contacted and enrolled in the five-year, all women, household recruiting approach.
2. All induced abortions occur between the second and sixth months of pregnancy and shift women from the relevant monthly CP group in Month  $m$  to CCU in Month  $m+1$ . The distribution across months is based on data from the CDC 2000 Abortion Surveillance report. The percent attributed to Month 2 ranges from 48 to 66 percent across primary age groups, while the cumulative percent attributed to Months 2 and 3 ranges from 83 to 91 percent.
3. A woman in the tenth month of pregnancy in Month  $m$  is assumed to deliver a live birth and shift into Other in Month  $m+1$ , unless the birth is not enrolled. In that case, the woman will shift to Dropped Out in Month  $m+1$ .
4. A woman is equally likely to seek pregnancy in Month  $m+1$  given that they are in CCU or Other in Month  $m$ , i.e.,  $P_{23}=P_{24}$ .
5. A woman is equally likely to move to the CCU or Other categories in Month  $m+1$  given that they are CSP in Month  $m$ , i.e.,  $P_{32}=P_{42}$ . These two rates are set to 0.04. Although we did not locate data to establish this rate, our thinking was that most women who decide to try to become pregnant will continue trying. To evaluate the sensitivity of this assumption, we set both rates at .02 for the five year, all women, household recruiting approach. This change led to a 0.17% decrease in the number of women needing to be contacted and enrolled.
6. Of women using contraception in Month  $m$ , two percent will shift to not using contraception but not seeking pregnancy in Month  $m+1$  [ $P(\text{Other}_{m+1}|\text{CCU}_m)$ ]. Again, we did not identify a data source to use for setting this rate, but we assumed it would be a small fraction. To check the sensitivity of this assumption, we ran iterations of the five year, all women, household recruiting approach with this rate set at .01, .03, and .05. Very small differences were seen in the number of women needing to be contacted and enrolled – a .05 percent increase at the .01 rate, a .01 percent decrease at the .03 level, and a .02 percent decrease at the .05 level.

Table A5 contains a sample transition matrix for two consecutive year-month age groups. This sample matrix illustrates how the Currently Pregnant category is split into ten groups representing each month of pregnancy. The percentage of women moving from one month of

pregnancy to the next depends upon the percentage of women dropping out of pregnancy status because of fetal losses and induced abortions. Each Year-Month age category has a calculated distribution of women across the four pregnancy/contraception status categories – CP, CSP, CCU, and Other. For example, the fraction of women seeking pregnancy in Month  $m$  of Table A6 matches the percentage of women seeking pregnancy calculated from the age-group level NSFG data. Table A6 reports how the transition matrix probabilities shown in Table A5 translate into actual numbers of women when 100,000 women are assumed to be in each age group to start. For the 23 years-1 month age category, the percentages of women in the four primary pregnancy/contraception status categories in Month  $m+1$  are 10.9 percent CP, 3.8 percent CSP, 65.5 percent CCU, and 19.8 percent Other, which are consistent with the data from Tables A1 and A2 above.

Tables A5 and A6 also allow the effect of the assumptions listed above to be inspected. In Table A6, the shaded cells for  $CCU_{m+1}|CSP_m$  and  $Other_{m+1}|CSP_m$  contain the same number of women (reflecting the fact that we assumed that women who stop trying to become pregnant are equally likely to move into either of the two other non-pregnant categories. Also, since we assume that women in the CCU and Other groups are equally likely to begin seeking pregnancy (with 1.4 percent of each group in this age category transitioning each month), the ratio of women moving from these groups into the CSP category is equal to the ratio of total women in these categories (e.g.,  $917.79/283.54$  is equal to  $65,232.42/20,152.59$ ).

**Table A5. Transition Matrix Probabilities for Two Consecutive Year-Month Age Categories**

Preg./Cont. Status, Month m+1	Pregnancy/Contraception Status, Month m												
	CP1	CP2	CP3	CP4	CP5	CP6	CP7	CP8	CP9	CP10	CSP	CCU	Other
<b>Age Category 23 Years, 1 Month</b>													
CP1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.25905	.00178	.02175
CP2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP3	0.0	.78087	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP4	0.0	0.0	.86003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP5	0.0	0.0	0.0	.95695	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP6	0.0	0.0	0.0	0.0	.97697	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP7	0.0	0.0	0.0	0.0	0.0	.99424	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP8	0.0	0.0	0.0	0.0	0.0	0.0	.99903	0.0	0.0	0.0	0.0	0.0	0.0
CP9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.99903	0.0	0.0	0.0	0.0	0.0
CP10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.99903	0.0	0.0	0.0	0.0
CSP	0.0	.04662	.02483	.01153	.00361	.00061	.00062	.00062	.00062	0.0	.66095	.01407	.01407
CCU	0.0	.15139	.10390	.02630	.01779	.00486	.00007	.00007	.00007	0.0	0.04	.96415	.10061
Other	0.0	.02111	.01124	.00522	.00163	.00028	.00028	.00028	.00028	1.0	0.04	.02	.86357
Marg. Total	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<b>Age Category 23 Years, 2 Months</b>													
CP1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.25724	.00178	.02185
CP2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP3	0.0	.78080	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP4	0.0	0.0	.86038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP5	0.0	0.0	0.0	.95709	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP6	0.0	0.0	0.0	0.0	.97710	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP7	0.0	0.0	0.0	0.0	0.0	.99428	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CP8	0.0	0.0	0.0	0.0	0.0	0.0	.99903	0.0	0.0	0.0	0.0	0.0	0.0
CP9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.99903	0.0	0.0	0.0	0.0	0.0
CP10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.99903	0.0	0.0	0.0	0.0
CSP	0.0	.04699	.02502	.01161	.00363	.00062	.00062	.00062	.00062	0.0	.66276	.01420	.01420
CCU	0.0	.15131	.10347	.02614	.01765	.00482	.00007	.00007	.00007	0.0	0.04	.96403	.10243
Other	0.0	.02090	.01113	.00516	.00162	.00028	.00028	.00028	.00028	1.0	0.04	.02	.86153
Marg. Total	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

**Table A6. Transition Matrix Realization for Two Consecutive Year-Month Age Categories, 100,000 Women**

Preg./Cont. Status, Month m+1	Pregnancy/Contraception Status, Month m													
	CP1	CP2	CP3	CP4	CP5	CP6	CP7	CP8	CP9	CP10	CSP	CCU	Other	Total
<b>Age Category 23 Years, 1 Month</b>														
CP1	0	0	0	0	0	0	0	0	0	0	967.94	116.43	438.32	1522.69
CP2	1520.78	0	0	0	0	0	0	0	0	0	0	0	0	1520.78
CP3	0	1185.82	0	0	0	0	0	0	0	0	0	0	0	1185.82
CP4	0	0	1018.3	0	0	0	0	0	0	0	0	0	0	1018.28
CP5	0	0	0	972.39	0	0	0	0	0	0	0	0	0	972.39
CP6	0	0	0	0	947.698	0	0	0	0	0	0	0	0	947.698
CP7	0	0	0	0	0	939.671	0	0	0	0	0	0	0	939.671
CP8	0	0	0	0	0	0	935.987	0	0	0	0	0	0	935.987
CP9	0	0	0	0	0	0	0	932.143	0	0	0	0	0	932.143
CP10	0	0	0	0	0	0	0	0	928.137	0	0	0	0	928.137
CSP	0	70.8	29.39	11.71	3.5	.581	.579	.576	.574	0	2469.63	917.79	283.54	3788.67
CCU	0	229.9	123.02	26.72	17.253	4.596	.07	.069	.069	0	149.46	62893.55	2027.56	65472.27
Other	0	32.06	13.31	5.3	1.585	.263	.262	.261	.260	924.864	149.46	1304.65	17403.17	19835.45
Marg. Total	1520.78	1518.58	1184.0	1016.13	970.036	945.111	936.898	933.050	929.039	924.864	3736.49	65232.42	20152.59	100,000
<b>Age Category 23 Years, 2 Months</b>														
CP1	0	0	0	0	0	0	0	0	0	0	974.59	116.38	433.36	1524.32
CP2	1522.69	0	0	0	0	0	0	0	0	0	0	0	0	1522.69
CP3	0	1187.43	0	0	0	0	0	0	0	0	0	0	0	1187.43
CP4	0	0	1020.3	0	0	0	0	0	0	0	0	0	0	1020.25
CP5	0	0	0	974.58	0	0	0	0	0	0	0	0	0	974.58
CP6	0	0	0	0	950.123	0	0	0	0	0	0	0	0	950.123
CP7	0	0	0	0	0	942.28	0	0	0	0	0	0	0	942.28
CP8	0	0	0	0	0	0	938.757	0	0	0	0	0	0	938.757
CP9	0	0	0	0	0	0	0	935.077	0	0	0	0	0	935.077
CP10	0	0	0	0	0	0	0	0	931.237	0	0	0	0	931.237
CSP	0	71.46	29.67	11.83	3.534	.587	.584	.582	.58	0	2510.99	929.49	281.6	3840.91
CCU	0	230.12	122.7	26.61	17.161	4.57	.07	.069	.069	0	151.55	63116.96	2031.74	65701.61
Other	0	31.78	13.19	5.26	1.572	.261	.26	.259	.258	928.137	151.55	1309.45	17088.76	19530.72
Marg. Total	1522.69	1520.78	1185.8	1018.28	972.39	947.698	939.671	935.987	932.143	928.137	3788.67	65472.27	19835.45	100,000



Enrollment of a first child with the study is tracked as well as enrollment of subsequent children in the study. In the pregnancy estimation model, women who enroll a first study birth move into the category of women not on contraception but not seeking pregnancy. From this group, they then re-enter the transition matrix with the same probabilities of moving between categories as women who have not yet had a first study pregnancy or birth. The detailed output from the pregnancy estimation model is included in Appendices B through F.

### ***Enrollment of Live Births***

Additional women and potential live births will be lost between conception and enrollment of a live birth – some during pregnancy via attrition or failure of the pregnancy and some by declining to allow their child to participate upon birth. The previously-cited Attrition rate is applied continuously to all women remaining in the study, both pregnant and non-pregnant. Thus, it accounts for attrition of women across the entire period of recruitment. Application of the fetal loss and induced abortion rates in the pregnancy model removes additional pregnancies that do not result in live births. In addition, we also factor in incidence of multiple birth events and the number of children resulting from those events, as well as a Live Birth Enrollment rate that accounts for enrolled women delivering a child but choosing not to enroll the child.

- **Live Birth Enrollment Rate** - Westat (2002) estimated that 94 percent of live births from participating mothers will result in an initial infant exam/enrollment. The Collaborative Perinatal Project study in the 1960's reported about 97 percent. Cycle III of NHANES where there was both center and home exams had a range of 94-97 percent. For this exercise, we assumed a 94 percent live birth enrollment rate. We used this rate for both first live births and subsequent live births. In the case of subsequent live births, we assume that all women who enroll first live births remain available to the study for second pregnancy tracking.
- **Multiple Birth Multiplier** - Another factor considered in our models is the incidence of multiple births. Based on the average number of children per birth event from the 2002 National Vital Statistics birth data, we applied the multipliers in Table A7 to all live births to estimate the effect of multiple-birth pregnancies. Note that the incidence of multiple births increases across all age groups. The rates by age group were smoothed to estimate multipliers for exact year-month age categories.

**Table A7. Multiple Birth Multipliers by Age Group**

<b>Age Groups</b>	<b>15 to 19 years</b>	<b>20 to 24 years</b>	<b>25 to 29 years</b>	<b>30 to 34 years</b>	<b>35 to 39 years</b>	<b>40 to 44 years</b>
<b>Multiple Birth Multiplier</b>	1.0082	1.0117	1.0158	1.0219	1.0273	1.0297

(d) Table 50. Martin et al. Births: Final Data for 2002. National Vital Statistics Reports, Vol. 52. No. 10. December 17, 2003

## **II. CORRECTION FACTORS FOR SPECIFIC SAMPLING APPROACHES**

To allow for differential rates of recruitment based on initial status, as well as the tracking of women who have more than one live birth event during the recruitment period, the probabilistic model tracks women in three separate classes:

1. Women enrolled in the study, but have not yet had a live birth event during the course of follow-up,
2. Women enrolled in the study, and have had a live-birth event in which the child was enrolled in the NCS (thus tracking women for a subsequent live birth event), and
3. Women who are not enrolled in the study (due to non-response, attrition, or sampling specific exclusion criteria)

Tracking women not enrolled in the NCS as part of this third class allows us to maintain the appropriate marginal probabilities of being in the CP, CSP, CCU and Other categories across the entire population, while also accounting for the effects of attrition, non-response and differential sampling. The same series of age-specific transition matrices are used to shift women from one category to another each month within each of the three classes.

The probabilistic model provides reasonably accurate projections for the number of women that need to be contacted and recruited using sampling approaches that attempt to recruit all age-eligible women from the population. However, in the sections that follow, we discuss a number of sampling approaches for consideration that recruit/enroll women based on their pregnancy/contraceptive status at first contact. For example, a number of sampling approaches focus on enrollment of women who are CP or CSP – while excluding women who in the CCU or Other categories.

Sampling approaches that apply differential rates of recruitment based upon initial status may in fact require different age-specific transition matrices for each class – mostly due to the fact that women who become pregnant from the CSP category are probably much less likely to have an induced abortion than women who become pregnant from the CCU or Other categories.

Development of class-specific transition matrices would have taken more time and effort than was permitted in this work assignment, and therefore we utilized an alternative approach that applies a correction factor to the results of the probabilistic model based on the sampling approach utilized.

The first part of this approach was to identify an appropriate multiplicative factor to apply to any disproportional subset of women enrolled in the study that would not seek induced abortion (i.e. the proportion of women in the CP/CSP categories that are sampled at a rate that is higher than would be observed in the general population). For example, this rate would apply to sampling strategies that only enroll currently pregnant women or women seeking pregnancy from physician's offices (presumably, any woman who is currently pregnant and is considering abortion would not join the study after being referred to the NCS by her physician). This rate would also apply to sampling strategies that oversample women in these two categories, while still enrolling some women from the CCU and Other categories.

The multiplicative factor is described in the following equation:

$$\sum_{i=1}^{360} \frac{[P(LB_i) + P(FL_i) + P(IA_i)]}{[P(LB_i) + P(FL_i)]} \bullet P(Recruitment_i) \bullet \frac{P(LB_i)}{P(LB_{\bullet})},$$

where  $P(LB_i)$ ,  $P(FL_i)$  and  $P(IA_i)$  are age-specific (by month) probabilities of having a live-birth, fetal loss, or induced abortion;  $P(Recruitment_i)$  is the proportion of the study sample of women expected to be enrolled at age(i) [ $i=1, \dots, 360$  corresponds to the monthly increments from age 15 to 45], and  $P(LB_{\bullet})$  is the average monthly probability of a live-birth event across all age groups.

This multiplicative factor was calculated at a value of 1.265, and represents the proportion of additional live-birth events that would be expected from any oversampled subset of the population that would not have induced abortions.

Interpreted a different way, we can divide the number of projected households and women sampled from any approach that exclusively enrolls women in the CP and CSP categories by 1.265 to correct for the assumption that these women will not have induced abortions. This correction factor was applied to all relevant sampling strategies presented in Table 1 of the main body of this report. Application of this multiplication correction factor comes with an implicit assumption that the fraction of NCS study participants that are initially oversampled from the CP and/or CSP categories would never seek an induced abortion. Refer to the following sections for more information related to the results of the probability model prior to application of this correction factor, as well as specific details on how the correction factor was applied (i.e., formulas for determining the fraction of CP/CSP that were oversampled).

### **III. APPLICATION OF CORRECTION FACTOR FOR OVERSAMPLING CP/CSP CATEGORIES**

In the main body of the report, we provide a summary of the number of households/women initially targeted, contacted, and enrolled under a variety of different sampling approaches. These numbers are based on the results of applying the transition matrix based probability model after applying a correction factor to the fraction of women who were oversampled from the CP and CSP categories (because this subset of women would likely not seek induced abortions, and would therefore result in a higher yield of live births to the study than would be expected in the general population).

Table A8 below provides a similar summary to that presented in Table 1 of the main body – but represents numbers prior to the application of the multiplicative correction factor for oversampling CP and CSP women.

**Table A8. Summary of Number of Households/Women That Need to be Targeted, Contacted, and Enrolled in the Recruitment Process to Obtain 100,000 Live Births – prior to application of the multiplicative correction factor for oversampling CP and CSP Women**

Multiplicative correction factor for oversampling CP and CSP Women					
Sampling Approach	Pregnancy Status of Women Targeted	Initial Enrollment Rate	# of Households/ Women Initially Targeted	# of Women Contacted	# of Women Enrolled
3-Year Recruitment Period					
Household	All	80 %	1,741,434	848,688	679,345
		60 %	2,304,195	1,122,949	674,291
	CP & CSP	80 %	3,862,401	1,882,341	158,973
		60 %	5,050,832	2,461,523	158,973
Physicians' Offices	80% CP, 20% CSP	80 %	198,653	188,720	160,412
		60 %	259,776	246,788	160,412
	80% CP, 10% CSP, 10% CCU/Other	80 %	311,020	295,469	243,794
		60 %	410,722	390,186	243,794
4-Year Recruitment Period					
Household	All	80 %	1,293,263	630,272	504,510
		60 %	1,714,209	835,420	501,640
	CP & CSP	80 %	3,503,355	1,707,360	144,195
		60 %	4,581,310	2,232,702	144,195
Physicians' Offices	80% CP, 20% CSP	80 %	185,191	175,932	149,542
		60 %	242,173	230,064	149,542
	80% CP, 10% CSP, 10% CCU/Other	80 %	251,324	238,758	198,175
		60 %	331,251	314,688	198,175
5-Year Recruitment Period					
Household	All	80 %	1,045,711	509,627	407,939
		60 %	1,387,466	676,181	406,023
	CP & CSP	80 %	3,238,187	1,578,131	133,281
		60 %	4,234,553	2,063,709	133,281
Physicians' Offices	80% CP, 20% CSP	80 %	174,853	166,111	141,194
		60 %	228,654	217,222	141,194
	80% CP, 10% CSP, 10% CCU/Other	80 %	240,222	228,211	189,364
		60 %	316,648	300,816	189,364

The multiplicative correction factor is applied to the fraction of women that are oversampled from the CP and CSP categories. The following bullets describe how the correction factor was applied:

- For Household Sampling Approaches that Target All Women, there is no need to apply any correction factor. The numbers in Table A8 above should identically match the numbers in Table 1 of the main body.
- For Household Sampling Approaches that Target Women only in the CP and CSP Categories, the numbers in Table A8 are divided by the multiplicative factor of 1.265 to account for the fact that these women are unlikely to undergo induced abortion. This same approach is used to adjust for the Physician's Office Approach that samples 80 percent of women from the CP category and 20 percent from the CSP category.
- For the Physician's Office Approach that includes 10 percent of the sample from the CCU/Other categories, we need to determine the fraction of the sample that is

oversampled from the CP/CSP categories. This fraction will be lower than the 90 percent that is sampled from the CP/CSP categories – because only a subset of this 90 percent is actually oversampled. To determine the fraction that is oversampled, we estimated that at any given time during initial recruitment, approximately 10 percent of the population would be in the CP/CSP categories and 90 percent would be in the CCU/Other Categories. To determine the fraction of CP/CSP women who are oversampled, we divide the number of women sampled from the CCU/Other categories by 0.9 (representing the number of women who are sampled proportionally from the population). The remainder of women sampled using this strategy are oversampled from the CP/CSP categories (and can be divided by 1.265 to appropriately account for the higher yield of live births because these women do not have induced abortions).

The numbers that appear in Table A8 above correspond to the output generated directly from the transition matrix-based probability model. Specific output from this model (prior to the application of the correction factor for oversampling) can be found in Appendices B through F.

#### **IV. HOUSEHOLD SAMPLING APPROACH**

Use of a household sampling frame for recruitment likely involves drawing a probability-based sample of primary sampling units (PSUs), secondary sampling units (SSUs), and households within those SSUs. The households would be selected without knowledge regarding the presence of age-eligible women. We estimated the number of households that would need to be targeted in this way to yield 100,000 live births. We generated estimates for six different household recruitment options and two levels of initial enrollment rates. Table A8 contains the required number of households to be targeted, the number of age-eligible women able to be contacted in those households, and the number of eligible women enrolled under each option. The detailed results of the probability models are in Appendices B and C. Appendix B contains the results from the recruitment options enrolling all women while Appendix C<sup>2</sup> contains the results of the options enrolling only CP and CSP women. Table A9 reports the number of 1<sup>st</sup> and subsequent births achieved by each pregnancy/contraception status group under each recruitment option with the 80 percent average initial enrollment rate (85 percent for the CP/CSP-only option). The 60 percent initial enrollment rate primarily impacts the models by increasing the number of households that need to be targeted and women that need to be contacted.

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<sup>2</sup> Appendix C represents the results of the probabilistic models prior to applying the correction factor described in Sections II and III.

**Table A9. Number of Live Births in Household Recruitment Models by Initial Pregnancy/Contraception Status of Women and Study Birth Order\***

P/C Status of Women	1st/2nd Birth Distribution	All Women			CP & CSP Women		
		3 Years	4 Years	5 Years	3 Years	4 Years	5 Years
CP	1st Births	29,856	22,823	18,885	66,218	61,825	58,480
	2nd Births	3,076	3,898	4,380	6,823	10,559	13,563
	Total	32,932	26,720	23,265	73,042	72,383	72,043
CSP	1st Births	11,600	9,237	7,825	25,729	25,023	24,232
	2nd Births	554	957	1,203	1,230	2,593	3,724
	Total	12,155	10,195	9,028	26,958	27,617	27,957
Other	1st Births	19,082	20,519	21,095	0	0	0
	2nd Births	555	1,485	2,517	0	0	0
	Total	19,637	22,004	23,613	0	0	0
CCU	1st Births	34,594	38,935	40,280	0	0	0
	2nd Births	681	2,146	3,814	0	0	0
	Total	35,276	41,081	44,094	0	0	0
Total	1st Births	95,133	91,514	88,086	91,947	86,848	82,712
	2nd Births	4,867	8,486	11,914	8,053	13,152	17,288
	Total	100,000	100,000	100,000	100,000	100,000	100,000

\* Prior to application of correction factor described in Sections II and III.

## **V. PHYSICIAN'S OFFICE RECRUITMENT APPROACH**

Another potential method for identifying women for recruitment into the study is to work through physicians' offices or clinics. The specific sampling mechanism by which the study would identify patients for recruitment under this option is not clear. It could happen in a number of ways, which impact the potential number of women that would need to be targeted for initial sampling. Alternatives we consider for this exercise assume that physicians would be able to make some information on patients available to the study. Two potentially critical pieces of information are a woman's age and her pregnancy/contraception status.

A constraint we placed upon these options that would capitalize on potential efficiencies afforded by the Physician's Office Model is that 80 percent of the live births enrolled would stem from women already pregnant when they are initially enrolled. Two options were considered for obtaining the other 20,000 live births. In one, all would come from women who were seeking pregnancy at enrollment. In the other, 10,000 births would come from CSP women while the other 10,000 would come from women who are avoiding pregnancy or current contraception users at initial enrollment. It may be important to include women in this category as they may encounter different environmental factors prior to becoming pregnant.

Table A8 reported the number of women that would need to be contacted in these options with a three, four, and five-year window for enrolling live births. Detailed results of the probability models are included in Appendices D and E (prior to the application of the correction factor described in Sections II and III. Appendix D contains the results of the recruitment approaches

enrolling all women with 80 percent of live births from CPs, 10 percent from CSPs, and 5 percent each from CCUs and Others. Appendix E contains the results of the recruitment options enrolling only CP and CSP women. Table A10 summarizes the number of 1<sup>st</sup> and subsequent births attributed to each pregnancy/contraception status group across the six recruitment options considered under the Physician's Office approach.

**Table A10. Number of Live Births in Physician's Office Models by Pregnancy/Contraception Status of Women and Study Birth Order\***

Preg/Contrac. Status of Women	1st/2nd Birth Distribution	80% CP, 10% CSP, 10% CCU/Other			80% CP, 20% CSP		
		3 Years	4 Years	5 Years	3 Years	4 Years	5 Years
CP	1st Births	75,774	73,338	71,149	75,774	73,338	71,149
	2nd Births	4,226	6,662	8,851	4,226	6,662	8,851
	Total	80,000	80,000	80,000	80,000	80,000	80,000
CSP	1st Births	9,544	9,061	8,668	19,088	18,122	17,336
	2nd Births	456	939	1,332	912	1,878	2,664
	Total	10,000	10,000	10,000	20,000	20,000	20,000
OTHER	1st Births	4,859	4,662	4,467	0	0	0
	2nd Births	141	338	533	0	0	0
	Total	5,000	5,000	5,000	0	0	0
CCU	1st Births	4,903	4,739	4,568	0	0	0
	2nd Births	97	261	432	0	0	0
	Total	5,000	5,000	5,000	0	0	0
Total	1st Births	95,080	91,800	88,851	94,862	91,460	88,484
	2nd Births	4,920	8,200	11,149	5,138	8,540	11,516
	Total	100,000	100,000	100,000	100,000	100,000	100,000

\* Prior to application of correction factor described in Sections II and III.

## **VI. FULL COMMUNITY RECRUITMENT APPROACH**

Another potential recruitment approach under consideration is enrolling all eligible women in selected communities, e.g. 100 communities within 25 geographic regions. At this point, we have not completely formulated specific details how to generate estimates of women needing to be contacted under this approach. Recruitment for the full community approach may result in some prior information being available for a subset of women that contact the study, and other women having to be contacted via door-to-door enumeration visits. Thus, the estimation for this approach might be a combination of the Household and Physician's Office approaches. We developed an initial "full community" approach to illustrate how these results may differ from the Household and Physician's Office approaches. To generate these initial estimates, we assumed that half of the live births will originate from women whose age-eligibility and pregnancy/contraception status is known from them contacting recruiters, while the other half of the births stem from a household sampling approach that factors in the household vacancy rate, a contact rate, and a rate of age-eligible women per household.

For the women who contacted the study, we assume that they are enrolled in Months 1 through 6 of the recruitment period and tracked over the full four-year period. For the women who have to be identified via door-to-door visits, we assume that they are enrolled from Month 7 to Month 12 of the recruitment period and tracked throughout the time remaining so that, on average, these women are tracked for six fewer months than the women who contacted the study. Regarding initial enrollment rates, we assume that the self-reporting or volunteer women have an average 90 percent initial enrollment rate with CP/CSP women at 95 percent and CCU/Other women at 89.5 percent. Women contacted via household recruitment are assumed to have an 80 percent average initial enrollment rate – 85 percent for CP/CSP women and 79.5 percent for CCU/Other women.

Self-reporting of women to the study over the first six months of recruitment will lead to a lower rate of age-eligible women per household in the community when door-to-door contacts occur in the second six month period. To reflect this, we utilized a rate of .40 age-eligible women per household for the household recruitment group. If a community has 5,700 age-eligible women in 10,000 households, we assumed that approximately 2,850 would contact the study leaving another 2,850 women over approximately 7,150 households (if each of the first 2,850 women were in a separate household) for a rate of .40 women per household. Tables F2a through F2c in Appendix F contain the results for this approach over a four-year recruitment period. Table F2a contains the combined results while Table F2b contains the results for the self-reporting women and F2c contains the results for the women identified via door-to-door sampling. The overall results are quite similar to those found for the four-year, All Women, 80 percent average initial enrollment rate, household recruiting option presented in Table B3. In the Full Community approach, estimates of households required are about 2.5 percent lower; estimated number of women to be contacted is about 4.8 percent lower; and estimated number of women enrolled is .5 percent higher than the comparable household recruiting approach. Note that the higher number of enrolled women is likely caused by the shorter follow-up period for those women contacted via door-to-door sampling.

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## **APPENDIX B**

### **DETAILED OUTPUT OF PROBABILISTIC MODELS FOR HOUSEHOLD RECRUITMENT MODEL OF ALL WOMEN**

**Table B1. Estimated Household Sample Size for Three-Year Recruitment Period of All Women with 80% Average Initial Enrollment Rate**

<b>Recruitment Period:</b> 3 Years (all births by 39 months)					<b>Women Recruited: ALL</b>		
<b>Estimated Initial Enrollment Rate:</b> 80%					Distribution of Age-Eligible Women by Age Group:		
Number of Households Sampled: 1,741,434							
Unit Occupation Rate: 0.9							
Contact Rate: 0.95							
Age-Eligible Women Rate: 0.57							
Age-Eligible Women: 848,688							
Number of Enrolled 1st Live Births 95,133							
Number of Enrolled 2nd Live Births 4,867							
Total Enrolled Live Births 100,000							
<b>Currently Pregnant (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	7,072	0.85	6,011	3,184	134	
20 to 24	0.1036	13,313	0.85	11,316	7,470	955	
25 to 29	0.10329	13,528	0.85	11,499	8,209	1107	
30 to 34	0.07736	10,798	0.85	9,179	6,724	673	
35 to 39	0.0354	5,563	0.85	4,728	3,470	193	
40 to 44	0.00782	1,261	0.85	1,072	800	14	
Age-Eligible Women:		51,535		43,805	29,856	3,076	0.752
<b>Currently Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	1,277	0.85	1,085	339	9	
20 to 24	0.0340	4,397	0.85	3,737	1,613	117	
25 to 29	0.0610	7,817	0.85	6,645	3,181	214	
30 to 34	0.0620	8,597	0.85	7,307	3,518	162	
35 to 39	0.0460	7,201	0.85	6,121	2,254	49	
40 to 44	0.0220	3,501	0.85	2,976	694	4	
Age-Eligible Women:		32,789		27,871	11,600	554	0.436
<b>Not on Contraception/Not Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	85,180	0.795	67,718	5,017	60	
20 to 24	0.2284	31,395	0.795	24,959	7,294	292	
25 to 29	0.1427	18,610	0.795	14,795	3,172	143	
30 to 34	0.1336	19,203	0.795	15,266	2,042	47	
35 to 39	0.1896	30,160	0.795	23,978	1,197	12	
40 to 44	0.2552	40,343	0.795	32,072	361	1	
Age-Eligible Women:		224,891		178,788	19,082	555	0.110
<b>Current Contraceptive Users (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.298	39,356	0.795	31,288	1,192	12	
20 to 24	0.634	79,418	0.795	63,138	7,389	187	
25 to 29	0.693	91,070	0.795	72,401	11,080	286	
30 to 34	0.727	101,694	0.795	80,847	9,332	157	
35 to 39	0.729	115,322	0.795	91,681	4,608	37	
40 to 44	0.715	112,613	0.795	89,528	993	2	
Age-Eligible Women:		539,473		428,881	34,594	681	0.082

**Table B2. Estimated Household Sample Size for Three-Year Recruitment Period of All Women with 60% Average Initial Enrollment Rate**

Recruitment Period:			3 Years (all births by 39 months)			Women Recruited: ALL		
Estimated Initial Enrollment Rate:			60%		Distribution of Age-Eligible Women by Age Group:			
Number of Households Sampled:			2,304,195		Age Groups		Sampled Population	
Unit Occupation Rate:			0.9		15 to 19		175,827	
Contact Rate:			0.95		20 to 24		170,056	
Age-Eligible Women Rate:			0.57		25 to 29		173,368	
Age-Eligible Women:			1,122,949		30 to 34		185,628	
Number of Enrolled 1st Live Births			95,102		35 to 39		209,384	
Number of Enrolled 2nd Live Births			4,898		40 to 44		208,686	
Total Enrolled Live Births			100,000		Total		1,122,949	
Currently Pregnant (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.05349	9,358	0.65	6,082	3,221	136		
20 to 24	0.1036	17,615	0.65	11,450	7,558	966		
25 to 29	0.10329	17,900	0.65	11,635	8,306	1120		
30 to 34	0.07736	14,288	0.65	9,287	6,804	681		
35 to 39	0.0354	7,360	0.65	4,784	3,511	196		
40 to 44	0.00782	1,669	0.65	1,085	809	14		
Age-Eligible Women:		68,189		44,323	30,209	3,113	0.752	
Currently Seeking Pregnancy (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.0090	1,689	0.65	1,098	343	9		
20 to 24	0.0340	5,818	0.65	3,782	1,632	119		
25 to 29	0.0610	10,344	0.65	6,723	3,219	217		
30 to 34	0.0620	11,375	0.65	7,394	3,560	164		
35 to 39	0.0460	9,528	0.65	6,193	2,280	49		
40 to 44	0.0220	4,632	0.65	3,011	703	4		
Age-Eligible Women:		43,386		28,201	11,737	561	0.436	
Not on Contraception/Not Seeking Pregnancy (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.6395	112,707	0.595	67,060	4,968	60		
20 to 24	0.2284	41,540	0.595	24,717	7,223	289		
25 to 29	0.1427	24,624	0.595	14,651	3,141	142		
30 to 34	0.1336	25,409	0.595	15,118	2,022	47		
35 to 39	0.1896	39,907	0.595	23,745	1,186	12		
40 to 44	0.2552	53,380	0.595	31,761	357	1		
Age-Eligible Women:		297,566		177,052	18,897	550	0.110	
Current Contraceptive Users (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.298	52,074	0.595	30,984	1,181	12		
20 to 24	0.634	105,083	0.595	62,524	7,318	185		
25 to 29	0.693	120,501	0.595	71,698	10,972	283		
30 to 34	0.727	134,557	0.595	80,061	9,241	155		
35 to 39	0.729	152,589	0.595	90,790	4,563	37		
40 to 44	0.715	149,005	0.595	88,658	983	2		
Age-Eligible Women:		713,808		424,716	34,259	675	0.082	

**Table B3. Estimated Household Sample Size for Four-Year Recruitment Period of All Women with 80% Average Initial Enrollment Rate**

Recruitment Period:			4 Years (all births by 51 months)			Women Recruited: ALL		
Estimated Initial Enrollment Rate:			80%		Distribution of Age-Eligible Women by Age Group:			
Number of Households Sampled:			1,293,263		Age Groups		Sampled Population	
Unit Occupation Rate:			0.9		15 to 19		98,685	
Contact Rate:			0.95		20 to 24		95,446	
Age-Eligible Women Rate:			0.57		25 to 29		97,305	
Age-Eligible Women:			630,272		30 to 34		104,186	
Number of Enrolled 1st Live Births			91,514		35 to 39		117,520	
Number of Enrolled 2nd Live Births			8,486		40 to 44		117,128	
Total Enrolled Live Births			100,000		Total		630,272	
Currently Pregnant (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.05349	5,252	0.85	4,464	2,382	140		
20 to 24	0.1036	9,887	0.85	8,404	5,707	1117		
25 to 29	0.10329	10,046	0.85	8,539	6,324	1411		
30 to 34	0.07736	8,019	0.85	6,816	5,163	922		
35 to 39	0.0354	4,131	0.85	3,511	2,643	285		
40 to 44	0.00782	937	0.85	796	604	24		
Age-Eligible Women:		38,272		32,531	22,823	3,898	0.821	
Currently Seeking Pregnancy (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.0090	948	0.85	806	256	11		
20 to 24	0.0340	3,265	0.85	2,775	1,253	165		
25 to 29	0.0610	5,806	0.85	4,935	2,521	350		
30 to 34	0.0620	6,384	0.85	5,427	2,825	314		
35 to 39	0.0460	5,348	0.85	4,546	1,815	107		
40 to 44	0.0220	2,600	0.85	2,210	568	10		
Age-Eligible Women:		24,351		20,698	9,237	957	0.493	
Not on Contraception/Not Seeking Pregnancy (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.6395	63,258	0.795	50,290	4,976	140		
20 to 24	0.2284	23,315	0.795	18,536	8,189	781		
25 to 29	0.1427	13,821	0.795	10,987	3,411	380		
30 to 34	0.1336	14,261	0.795	11,337	2,221	142		
35 to 39	0.1896	22,398	0.795	17,807	1,301	39		
40 to 44	0.2552	29,960	0.795	23,818	420	3		
Age-Eligible Women:		167,013		132,776	20,519	1,485	0.166	
Current Contraceptive Users (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.298	29,227	0.795	23,236	1,121	26		
20 to 24	0.634	58,979	0.795	46,889	7,999	508		
25 to 29	0.693	67,633	0.795	53,768	12,390	894		
30 to 34	0.727	75,522	0.795	60,040	10,666	559		
35 to 39	0.729	85,643	0.795	68,086	5,491	149		
40 to 44	0.715	83,631	0.795	66,487	1,268	9		
Age-Eligible Women:		400,635		318,505	38,935	2,146	0.129	

**Table B4. Estimated Household Sample Size for Four-Year Recruitment Period of All Women with 60% Average Initial Enrollment Rate**

<b>Recruitment Period:</b>		4 Years (all births by 51 months)			<b>Women Recruited: ALL</b>																		
<b>Estimated Initial Enrollment Rate:</b>		60%			Distribution of Age-Eligible Women by Age Group:																		
Number of Households Sampled:		1,714,209			<table><tr><th>Age Groups</th><th>Sampled Population</th></tr><tr><td>15 to 19</td><td>130,807</td></tr><tr><td>20 to 24</td><td>126,513</td></tr><tr><td>25 to 29</td><td>128,977</td></tr><tr><td>30 to 34</td><td>138,098</td></tr><tr><td>35 to 39</td><td>155,772</td></tr><tr><td>40 to 44</td><td>155,252</td></tr><tr><td>Total</td><td>835,420</td></tr></table>			Age Groups	Sampled Population	15 to 19	130,807	20 to 24	126,513	25 to 29	128,977	30 to 34	138,098	35 to 39	155,772	40 to 44	155,252	Total	835,420
Age Groups	Sampled Population																						
15 to 19	130,807																						
20 to 24	126,513																						
25 to 29	128,977																						
30 to 34	138,098																						
35 to 39	155,772																						
40 to 44	155,252																						
Total	835,420																						
Unit Occupation Rate:		0.9																					
Contact Rate:		0.95																					
Age-Eligible Women Rate:		0.57																					
Age-Eligible Women:		835,420																					
Number of Enrolled 1st Live Births		91,476																					
Number of Enrolled 2nd Live Births		8,524																					
Total Enrolled Live Births		100,000																					
<b>Currently Pregnant (at enrollment)</b>																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.05349	6,962	0.65	4,525	2,415	142																	
20 to 24	0.1036	13,105	0.65	8,518	5,784	1132																	
25 to 29	0.10329	13,316	0.65	8,656	6,410	1430																	
30 to 34	0.07736	10,630	0.65	6,909	5,233	934																	
35 to 39	0.0354	5,476	0.65	3,559	2,679	289																	
40 to 44	0.00782	1,241	0.65	807	612	24																	
Age-Eligible Women:		50,729		32,974	23,133	3,951	0.821																
<b>Currently Seeking Pregnancy (at enrollment)</b>																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.0090	1,257	0.65	817	259	11																	
20 to 24	0.0340	4,328	0.65	2,813	1,270	167																	
25 to 29	0.0610	7,695	0.65	5,002	2,556	355																	
30 to 34	0.0620	8,462	0.65	5,500	2,863	319																	
35 to 39	0.0460	7,088	0.65	4,607	1,840	109																	
40 to 44	0.0220	3,446	0.65	2,240	576	10																	
Age-Eligible Women:		32,277		20,980	9,363	970	0.493																
<b>Not on Contraception/Not Seeking Pregnancy (at enrollment)</b>																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.6395	83,848	0.595	49,890	4,937	139																	
20 to 24	0.2284	30,904	0.595	18,388	8,124	774																	
25 to 29	0.1427	18,319	0.595	10,900	3,384	377																	
30 to 34	0.1336	18,903	0.595	11,247	2,204	141																	
35 to 39	0.1896	29,689	0.595	17,665	1,290	38																	
40 to 44	0.2552	39,712	0.595	23,629	416	3																	
Age-Eligible Women:		221,375		131,718	20,355	1,474	0.166																
<b>Current Contraceptive Users (at enrollment)</b>																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.298	38,740	0.595	23,050	1,112	26																	
20 to 24	0.634	78,177	0.595	46,515	7,935	504																	
25 to 29	0.693	89,647	0.595	53,340	12,291	887																	
30 to 34	0.727	100,104	0.595	59,562	10,581	555																	
35 to 39	0.729	113,519	0.595	67,544	5,448	148																	
40 to 44	0.715	110,853	0.595	65,957	1,257	9																	
Age-Eligible Women:		531,039		315,968	38,625	2,129	0.129																

**Table B5. Estimated Household Sample Size for Five-Year Recruitment Period of All Women with 80% Average Initial Enrollment Rate**

Recruitment Period:			5 Years (all births by 63 months)			Women Recruited: ALL		
Estimated Initial Enrollment Rate:			80%		Distribution of Age-Eligible Women by Age Group:			
Number of Households Sampled:			1,045,711				Age Groups	Sampled Population
Unit Occupation Rate:			0.9				15 to 19	79,795
Contact Rate:			0.95				20 to 24	77,176
Age-Eligible Women Rate:			0.57				25 to 29	78,679
Age-Eligible Women:			509,627				30 to 34	84,244
Number of Enrolled 1st Live Births			88,086				35 to 39	95,025
Number of Enrolled 2nd Live Births			11,914				40 to 44	94,708
Total Enrolled Live Births			100,000				Total	509,627
Currently Pregnant (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.05349	4,247	0.85	3,610	1,931	125		
20 to 24	0.1036	7,994	0.85	6,795	4,709	1169		
25 to 29	0.10329	8,123	0.85	6,905	5,266	1601		
30 to 34	0.07736	6,484	0.85	5,512	4,295	1097		
35 to 39	0.0354	3,340	0.85	2,839	2,187	355		
40 to 44	0.00782	757	0.85	644	496	33		
Age-Eligible Women:		30,946		26,304	18,885	4,380	0.884	
Currently Seeking Pregnancy (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.0090	767	0.85	652	208	10		
20 to 24	0.0340	2,640	0.85	2,244	1,042	179		
25 to 29	0.0610	4,694	0.85	3,990	2,130	421		
30 to 34	0.0620	5,162	0.85	4,388	2,414	420		
35 to 39	0.0460	4,324	0.85	3,676	1,548	156		
40 to 44	0.0220	2,102	0.85	1,787	484	16		
Age-Eligible Women:		19,690		16,736	7,825	1,203	0.539	
Not on Contraception/Not Seeking Pregnancy (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.6395	51,150	0.795	40,664	4,479	171		
20 to 24	0.2284	18,852	0.795	14,988	8,956	1336		
25 to 29	0.1427	11,175	0.795	8,884	3,598	670		
30 to 34	0.1336	11,531	0.795	9,167	2,289	260		
35 to 39	0.1896	18,111	0.795	14,398	1,326	73		
40 to 44	0.2552	24,225	0.795	19,259	447	7		
Age-Eligible Women:		135,044		107,360	21,095	2,517	0.220	
Current Contraceptive Users (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman	
15 to 19	0.298	23,633	0.795	18,788	974	29		
20 to 24	0.634	47,690	0.795	37,913	8,001	792		
25 to 29	0.693	54,687	0.795	43,476	12,784	1571		
30 to 34	0.727	61,066	0.795	48,547	11,179	1083		
35 to 39	0.729	69,249	0.795	55,053	5,906	316		
40 to 44	0.715	67,623	0.795	53,760	1,437	23		
Age-Eligible Women:		323,947		257,538	40,280	3,814	0.171	

**Table B6. Estimated Household Sample Size for Five-Year Recruitment Period of All Women with 60% Average Initial Enrollment Rate**

<b>Recruitment Period:</b>		5 Years (all births by 63 months)			<b>Women Recruited: ALL</b>		
<b>Estimated Initial Enrollment Rate:</b>		60%			Distribution of Age-Eligible Women by Age Group:		
Number of Households Sampled:		1,387,466					
Unit Occupation Rate:		0.9					
Contact Rate:		0.95					
Age-Eligible Women Rate:		0.57					
Age-Eligible Women:		676,181					
Number of Enrolled 1st Live Births		88,048					
Number of Enrolled 2nd Live Births		11,952					
Total Enrolled Live Births		100,000					
<b>Currently Pregnant (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	5,635	0.65	3,663	1,960	127	
20 to 24	0.1036	10,607	0.65	6,894	4,778	1186	
25 to 29	0.10329	10,778	0.65	7,006	5,343	1624	
30 to 34	0.07736	8,603	0.65	5,592	4,358	1113	
35 to 39	0.0354	4,432	0.65	2,881	2,219	361	
40 to 44	0.00782	1,005	0.65	653	503	33	
Age-Eligible Women:		41,060		26,689	19,161	4,444	0.884
<b>Currently Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	1,017	0.65	661	211	10	
20 to 24	0.0340	3,503	0.65	2,277	1,057	182	
25 to 29	0.0610	6,228	0.65	4,049	2,161	427	
30 to 34	0.0620	6,849	0.65	4,452	2,449	426	
35 to 39	0.0460	5,737	0.65	3,729	1,571	158	
40 to 44	0.0220	2,789	0.65	1,813	491	17	
Age-Eligible Women:		26,125		16,981	7,940	1,220	0.539
<b>Not on Contraception/Not Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	67,866	0.595	40,380	4,447	170	
20 to 24	0.2284	25,013	0.595	14,883	8,894	1326	
25 to 29	0.1427	14,827	0.595	8,822	3,573	665	
30 to 34	0.1336	15,300	0.595	9,103	2,273	258	
35 to 39	0.1896	24,030	0.595	14,298	1,317	73	
40 to 44	0.2552	32,143	0.595	19,125	444	7	
Age-Eligible Women:		179,179		106,611	20,948	2,500	0.220
<b>Current Contraceptive Users (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.298	31,356	0.595	18,657	967	29	
20 to 24	0.634	63,275	0.595	37,649	7,945	786	
25 to 29	0.693	72,559	0.595	43,173	12,694	1560	
30 to 34	0.727	81,023	0.595	48,209	11,101	1076	
35 to 39	0.729	91,881	0.595	54,669	5,865	313	
40 to 44	0.715	89,723	0.595	53,385	1,427	23	
Age-Eligible Women:		429,818		255,742	39,999	3,788	0.171



## **APPENDIX C**

### **DETAILED OUTPUT OF PROBABILISTIC MODELS FOR HOUSEHOLD RECRUITMENT MODEL OF CURRENTLY PREGNANT WOMEN AND WOMEN SEEKING PREGNANCY (Prior to Applying Correction Factors)**

**Table C1. Estimated Household Sample Size for Three-Year Recruitment Period of CP/CSP Women with 85% Initial Enrollment Rate**

Recruitment Period:		3 Years (all births by 39 months)			Women Enrolled: CP/CSP																		
Estimated Initial Enrollment Rate:		85%			Distribution of Age-Eligible Women by Age Group:																		
Number of Households Sampled:		3,862,401			<table><tr><th>Age Groups</th><th>Sampled Population</th></tr><tr><td>15 to 19</td><td>294,730</td></tr><tr><td>20 to 24</td><td>285,056</td></tr><tr><td>25 to 29</td><td>290,607</td></tr><tr><td>30 to 34</td><td>311,159</td></tr><tr><td>35 to 39</td><td>350,980</td></tr><tr><td>40 to 44</td><td>349,809</td></tr><tr><td>Total</td><td>1,882,341</td></tr></table>			Age Groups	Sampled Population	15 to 19	294,730	20 to 24	285,056	25 to 29	290,607	30 to 34	311,159	35 to 39	350,980	40 to 44	349,809	Total	1,882,341
Age Groups	Sampled Population																						
15 to 19	294,730																						
20 to 24	285,056																						
25 to 29	290,607																						
30 to 34	311,159																						
35 to 39	350,980																						
40 to 44	349,809																						
Total	1,882,341																						
Unit Occupation Rate:		0.9																					
Contact Rate:		0.95																					
Age-Eligible Women Rate:		0.57																					
Age-Eligible Women:		1,882,341																					
Number of Enrolled 1st Live Births		91,947																					
Number of Enrolled 2nd Live Births		8,053																					
Total Enrolled Live Births		100,000																					
Currently Pregnant (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.05349	15,686	0.85	13,333	7,061	298																	
20 to 24	0.1036	29,527	0.85	25,098	16,568	2118																	
25 to 29	0.10329	30,004	0.85	25,504	18,207	2455																	
30 to 34	0.07736	23,950	0.85	20,358	14,914	1493																	
35 to 39	0.0354	12,337	0.85	10,487	7,695	429																	
40 to 44	0.00782	2,797	0.85	2,378	1,774	31																	
Age-Eligible Women:		114,301		97,156	66,218	6,823	0.752																
Currently Seeking Pregnancy (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.0090	2,831	0.85	2,407	753	19																	
20 to 24	0.0340	9,752	0.85	8,289	3,578	260																	
25 to 29	0.0610	17,339	0.85	14,738	7,056	475																	
30 to 34	0.0620	19,067	0.85	16,207	7,803	359																	
35 to 39	0.0460	15,971	0.85	13,576	4,999	108																	
40 to 44	0.0220	7,765	0.85	6,600	1,540	8																	
Age-Eligible Women:		72,725		61,816	25,729	1,230	0.436																
Not on Contraception/Not Seeking Pregnancy (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.6395	188,924	0.0	0	0	0	n/a																
20 to 24	0.2284	69,632	0.0	0	0	0	n/a																
25 to 29	0.1427	41,276	0.0	0	0	0	n/a																
30 to 34	0.1336	42,591	0.0	0	0	0	n/a																
35 to 39	0.1896	66,894	0.0	0	0	0	n/a																
40 to 44	0.2552	89,478	0.0	0	0	0	n/a																
Age-Eligible Women:		498,795		-	-	-																	
Current Contraceptive Users (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.298	87,288	0.0	0	0	0	n/a																
20 to 24	0.634	176,145	0.0	0	0	0	n/a																
25 to 29	0.693	201,989	0.0	0	0	0	n/a																
30 to 34	0.727	225,551	0.0	0	0	0	n/a																
35 to 39	0.729	255,777	0.0	0	0	0	n/a																
40 to 44	0.715	249,770	0.0	0	0	0	n/a																
Age-Eligible Women:		1,196,520		-	-	-																	

**Table C2. Estimated Household Sample Size for Three-Year Recruitment Period of CP/CSP Women with 60% Initial Enrollment Rate**

Recruitment Period:			3 Years (all births by 39 months)			Women Enrolled: CP/CSP	
Estimated Initial Enrollment Rate:			65%		Distribution of Age-Eligible Women by Age Group:		
Number of Households Sampled:			5,050,832		Age Groups		Sampled Population
Unit Occupation Rate:			0.9		15 to 19		385,416
Contact Rate:			0.95		20 to 24		372,765
Age-Eligible Women Rate:			0.57		25 to 29		380,025
Age-Eligible Women:			2,461,523		30 to 34		406,900
Number of Enrolled 1st Live Births			91,947		35 to 39		458,974
Number of Enrolled 2nd Live Births			8,053		40 to 44		457,443
Total Enrolled Live Births			100,000		Total		2,461,523
Currently Pregnant (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	20,512	0.65	13,333	7,061	298	
20 to 24	0.1036	38,612	0.65	25,098	16,568	2118	
25 to 29	0.10329	39,236	0.65	25,504	18,207	2455	
30 to 34	0.07736	31,319	0.65	20,358	14,914	1493	
35 to 39	0.0354	16,133	0.65	10,487	7,695	429	
40 to 44	0.00782	3,658	0.65	2,378	1,774	31	
Age-Eligible Women:		149,471		97,156	66,218	6,823	0.752
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	3,703	0.65	2,407	753	19	
20 to 24	0.0340	12,753	0.65	8,289	3,578	260	
25 to 29	0.0610	22,674	0.65	14,738	7,056	475	
30 to 34	0.0620	24,933	0.65	16,207	7,803	359	
35 to 39	0.0460	20,886	0.65	13,576	4,999	108	
40 to 44	0.0220	10,154	0.65	6,600	1,540	8	
Age-Eligible Women:		95,102		61,816	25,729	1,230	0.436
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	247,055	0.0	0	0	0	n/a
20 to 24	0.2284	91,057	0.0	0	0	0	n/a
25 to 29	0.1427	53,976	0.0	0	0	0	n/a
30 to 34	0.1336	55,696	0.0	0	0	0	n/a
35 to 39	0.1896	87,477	0.0	0	0	0	n/a
40 to 44	0.2552	117,010	0.0	0	0	0	n/a
Age-Eligible Women:		652,270		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	114,146	0.0	0	0	0	n/a
20 to 24	0.634	230,344	0.0	0	0	0	n/a
25 to 29	0.693	264,139	0.0	0	0	0	n/a
30 to 34	0.727	294,951	0.0	0	0	0	n/a
35 to 39	0.729	334,478	0.0	0	0	0	n/a
40 to 44	0.715	326,622	0.0	0	0	0	n/a
Age-Eligible Women:		1,564,679		-	-	-	

**Table C3. Estimated Household Sample Size for Four-Year Recruitment Period of CP/CSP Women with 85% Initial Enrollment Rate**

Recruitment Period:				4 Years (all births by 51 months)		Women Enrolled: CP/CSP	
Estimated Initial Enrollment Rate:				85%		Distribution of Age-Eligible Women by Age Group:	
Number of Households Sampled:				3,503,355		Age Groups	
Unit Occupation Rate:				0.9		15 to 19	
Contact Rate:				0.95		20 to 24	
Age-Eligible Women Rate:				0.57		25 to 29	
Age-Eligible Women:				1,707,360		30 to 34	
Number of Enrolled 1st Live Births				86,848		35 to 39	
Number of Enrolled 2nd Live Births				13,152		40 to 44	
Total Enrolled Live Births				100,000		Total	
Currently Pregnant (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	14,228	0.85	12,094	6,453	380	
20 to 24	0.1036	26,782	0.85	22,765	15,459	3025	
25 to 29	0.10329	27,215	0.85	23,133	17,131	3822	
30 to 34	0.07736	21,724	0.85	18,465	13,985	2497	
35 to 39	0.0354	11,190	0.85	9,512	7,160	771	
40 to 44	0.00782	2,537	0.85	2,156	1,636	64	
Age-Eligible Women:		103,676		88,125	61,825	10,559	0.821
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	2,568	0.85	2,183	692	29	
20 to 24	0.0340	8,845	0.85	7,519	3,393	448	
25 to 29	0.0610	15,727	0.85	13,368	6,830	947	
30 to 34	0.0620	17,294	0.85	14,700	7,652	851	
35 to 39	0.0460	14,487	0.85	12,314	4,917	291	
40 to 44	0.0220	7,043	0.85	5,987	1,540	27	
Age-Eligible Women:		65,965		56,070	25,023	2,593	0.493
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	171,362	0.0	0	0	0	n/a
20 to 24	0.2284	63,159	0.0	0	0	0	n/a
25 to 29	0.1427	37,439	0.0	0	0	0	n/a
30 to 34	0.1336	38,632	0.0	0	0	0	n/a
35 to 39	0.1896	60,676	0.0	0	0	0	n/a
40 to 44	0.2552	81,160	0.0	0	0	0	n/a
Age-Eligible Women:		452,427		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	79,174	0.0	0	0	0	n/a
20 to 24	0.634	159,771	0.0	0	0	0	n/a
25 to 29	0.693	183,212	0.0	0	0	0	n/a
30 to 34	0.727	204,584	0.0	0	0	0	n/a
35 to 39	0.729	232,000	0.0	0	0	0	n/a
40 to 44	0.715	226,551	0.0	0	0	0	n/a
Age-Eligible Women:		1,085,292		-	-	-	

**Table C4. Estimated Household Sample Size for Four-Year Recruitment Period of CP/CSP Women with 65% Initial Enrollment Rate**

Recruitment Period:				4 Years (all births by 51 months)		Women Enrolled: CP/CSP	
Estimated Initial Enrollment Rate:				65%		Distribution of Age-Eligible Women by Age Group:	
Number of Households Sampled:				4,581,310		Age Groups	Sampled Population
Unit Occupation Rate:				0.9		15 to 19	349,588
Contact Rate:				0.95		20 to 24	338,113
Age-Eligible Women Rate:				0.57		25 to 29	344,698
Age-Eligible Women:				2,232,702		30 to 34	369,075
Number of Enrolled 1st Live Births				86,848		35 to 39	416,308
Number of Enrolled 2nd Live Births				13,152		40 to 44	414,920
Total Enrolled Live Births				100,000		Total	2,232,702
Currently Pregnant (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	18,605	0.65	12,094	6,453	380	
20 to 24	0.1036	35,023	0.65	22,765	15,459	3025	
25 to 29	0.10329	35,589	0.65	23,133	17,131	3822	
30 to 34	0.07736	28,408	0.65	18,465	13,985	2497	
35 to 39	0.0354	14,634	0.65	9,512	7,160	771	
40 to 44	0.00782	3,318	0.65	2,156	1,636	64	
Age-Eligible Women:		135,576		88,125	61,825	10,559	0.821
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	3,358	0.65	2,183	692	29	
20 to 24	0.0340	11,567	0.65	7,519	3,393	448	
25 to 29	0.0610	20,566	0.65	13,368	6,830	947	
30 to 34	0.0620	22,616	0.65	14,700	7,652	851	
35 to 39	0.0460	18,944	0.65	12,314	4,917	291	
40 to 44	0.0220	9,210	0.65	5,987	1,540	27	
Age-Eligible Women:		86,261		56,070	25,023	2,593	0.493
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	224,089	0.0	0	0	0	n/a
20 to 24	0.2284	82,593	0.0	0	0	0	n/a
25 to 29	0.1427	48,958	0.0	0	0	0	n/a
30 to 34	0.1336	50,519	0.0	0	0	0	n/a
35 to 39	0.1896	79,345	0.0	0	0	0	n/a
40 to 44	0.2552	106,132	0.0	0	0	0	n/a
Age-Eligible Women:		591,636		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	103,535	0.0	0	0	0	n/a
20 to 24	0.634	208,931	0.0	0	0	0	n/a
25 to 29	0.693	239,585	0.0	0	0	0	n/a
30 to 34	0.727	267,533	0.0	0	0	0	n/a
35 to 39	0.729	303,385	0.0	0	0	0	n/a
40 to 44	0.715	296,259	0.0	0	0	0	n/a
Age-Eligible Women:		1,419,228		-	-	-	

**Table C5. Estimated Household Sample Size for Five-Year Recruitment Period of CP/CSP Women with 85% Initial Enrollment Rate**

Recruitment Period:			5 Years (all births by 63 months)			Women Enrolled: CP/CSP	
Estimated Initial Enrollment Rate:			85%		Distribution of Age-Eligible Women by Age Group:		
Number of Households Sampled:			3,238,187		Age Groups		Sampled Population
Unit Occupation Rate:			0.9		15 to 19		247,098
Contact Rate:			0.95		20 to 24		238,987
Age-Eligible Women Rate:			0.57		25 to 29		243,642
Age-Eligible Women:			1,578,131		30 to 34		260,871
Number of Enrolled 1st Live Births			82,712		35 to 39		294,257
Number of Enrolled 2nd Live Births			17,288		40 to 44		293,276
Total Enrolled Live Births			100,000		Total		1,578,131
Currently Pregnant (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	13,151	0.85	11,178	5,981	388	
20 to 24	0.1036	24,755	0.85	21,042	14,584	3621	
25 to 29	0.10329	25,155	0.85	21,382	16,308	4957	
30 to 34	0.07736	20,079	0.85	17,068	13,299	3396	
35 to 39	0.0354	10,343	0.85	8,792	6,772	1101	
40 to 44	0.00782	2,345	0.85	1,993	1,537	102	
Age-Eligible Women:		95,829		81,454	58,480	13,563	0.884
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	2,374	0.85	2,018	643	31	
20 to 24	0.0340	8,176	0.85	6,950	3,227	555	
25 to 29	0.0610	14,537	0.85	12,356	6,595	1304	
30 to 34	0.0620	15,985	0.85	13,587	7,475	1301	
35 to 39	0.0460	13,390	0.85	11,382	4,793	484	
40 to 44	0.0220	6,510	0.85	5,534	1,500	51	
Age-Eligible Women:		60,972		51,826	24,232	3,724	0.539
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	158,392	0.0	0	0	0	n/a
20 to 24	0.2284	58,379	0.0	0	0	0	n/a
25 to 29	0.1427	34,605	0.0	0	0	0	n/a
30 to 34	0.1336	35,708	0.0	0	0	0	n/a
35 to 39	0.1896	56,083	0.0	0	0	0	n/a
40 to 44	0.2552	75,017	0.0	0	0	0	n/a
Age-Eligible Women:		418,183		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	73,181	0.0	0	0	0	n/a
20 to 24	0.634	147,678	0.0	0	0	0	n/a
25 to 29	0.693	169,345	0.0	0	0	0	n/a
30 to 34	0.727	189,099	0.0	0	0	0	n/a
35 to 39	0.729	214,440	0.0	0	0	0	n/a
40 to 44	0.715	209,404	0.0	0	0	0	n/a
Age-Eligible Women:		1,003,147		-	-	-	

**Table C6. Estimated Household Sample Size for Five-Year Recruitment Period of CP/CSP Women with 65% Initial Enrollment Rate**

Recruitment Period:			5 Years (all births by 63 months)			Women Enrolled: CP/CSP	
Estimated Initial Enrollment Rate:			65%		Distribution of Age-Eligible Women by Age Group:		
Number of Households Sampled:			4,234,553		Age Groups		Sampled Population
Unit Occupation Rate:			0.9		15 to 19		323,128
Contact Rate:			0.95		20 to 24		312,522
Age-Eligible Women Rate:			0.57		25 to 29		318,608
Age-Eligible Women:			2,063,709		30 to 34		341,140
Number of Enrolled 1st Live Births			82,712		35 to 39		384,798
Number of Enrolled 2nd Live Births			17,288		40 to 44		383,514
Total Enrolled Live Births			100,000		Total		2,063,709
Currently Pregnant (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	17,197	0.65	11,178	5,981	388	
20 to 24	0.1036	32,372	0.65	21,042	14,584	3621	
25 to 29	0.10329	32,895	0.65	21,382	16,308	4957	
30 to 34	0.07736	26,258	0.65	17,068	13,299	3396	
35 to 39	0.0354	13,526	0.65	8,792	6,772	1101	
40 to 44	0.00782	3,067	0.65	1,993	1,537	102	
Age-Eligible Women:		125,315		81,454	58,480	13,563	0.884
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	3,104	0.65	2,018	643	31	
20 to 24	0.0340	10,692	0.65	6,950	3,227	555	
25 to 29	0.0610	19,009	0.65	12,356	6,595	1304	
30 to 34	0.0620	20,904	0.65	13,587	7,475	1301	
35 to 39	0.0460	17,510	0.65	11,382	4,793	484	
40 to 44	0.0220	8,513	0.65	5,534	1,500	51	
Age-Eligible Women:		79,732		51,826	24,232	3,724	0.539
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	207,127	0.0	0	0	0	n/a
20 to 24	0.2284	76,341	0.0	0	0	0	n/a
25 to 29	0.1427	45,253	0.0	0	0	0	n/a
30 to 34	0.1336	46,695	0.0	0	0	0	n/a
35 to 39	0.1896	73,339	0.0	0	0	0	n/a
40 to 44	0.2552	98,099	0.0	0	0	0	n/a
Age-Eligible Women:		546,855		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	95,699	0.0	0	0	0	n/a
20 to 24	0.634	193,117	0.0	0	0	0	n/a
25 to 29	0.693	221,451	0.0	0	0	0	n/a
30 to 34	0.727	247,283	0.0	0	0	0	n/a
35 to 39	0.729	280,422	0.0	0	0	0	n/a
40 to 44	0.715	273,836	0.0	0	0	0	n/a
Age-Eligible Women:		1,311,807		-	-	-	

## **APPENDIX D**

### **DETAILED OUTPUT OF PROBABILISTIC MODELS FOR PHYSICIAN'S OFFICE RECRUITMENT MODEL OF ALL WOMEN (Prior to Applying Correction Factors)**

#### **Distribution of Live Births by Pregnancy/Contraception Status:**

**80% Currently Pregnant**  
**10% Seeking Pregnancy**  
**5% Current Contraception Users**  
**5% Not Using Contraception & Not Seeking Pregnancy**



**Table D1. Physician's Office Model: Estimated Sample Size of Women for Three-Year Recruitment Period of All Women with 80% Initial Enrollment Rate**

Recruitment Period:			3 Years (all births by 39 months)			Women Recruited: ALL	
Estimated Initial Enrollment Rate:			80%		Distribution of Age-Eligible Women by Age Group:		
Number of Women Targeted:			311,020		Age Groups		Sampled Population
Unit Occupation Rate:			1		15 to 19		46,811
Contact Rate:			0.95		20 to 24		57,681
Age-Eligible Women Rate:			1		25 to 29		59,455
Age-Eligible Women:			295,469		30 to 34		54,614
Number of Enrolled 1st Live Births			95,080		35 to 39		44,496
Number of Enrolled 2nd Live Births			4,920		40 to 44		32,412
Total Enrolled Live Births			100,000		Total		295,469
Currently Pregnant (at enrollment, through 29 months)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	18,494	0.85	15,720	8,223	190	
20 to 24	0.1036	34,813	0.85	29,591	18,921	1336	
25 to 29	0.10329	35,376	0.85	30,070	20,694	1524	
30 to 34	0.07736	28,238	0.85	24,002	17,039	904	
35 to 39	0.0354	14,546	0.85	12,364	8,845	255	
40 to 44	0.00782	3,298	0.85	2,803	2,053	18	
Age-Eligible Women:		134,766		114,551	75,774	4,226	0.698
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	1,050	0.85	893	279	7	
20 to 24	0.0340	3,617	0.85	3,075	1,327	97	
25 to 29	0.0610	6,432	0.85	5,467	2,617	176	
30 to 34	0.0620	7,073	0.85	6,012	2,894	133	
35 to 39	0.0460	5,925	0.85	5,036	1,854	40	
40 to 44	0.0220	2,880	0.85	2,448	571	3	
Age-Eligible Women:		26,977		22,930	9,544	456	0.436
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	21,688	0.795	17,242	1,277	15	
20 to 24	0.2284	7,994	0.795	6,355	1,857	74	
25 to 29	0.1427	4,738	0.795	3,767	808	36	
30 to 34	0.1336	4,889	0.795	3,887	520	12	
35 to 39	0.1896	7,679	0.795	6,105	305	3	
40 to 44	0.2552	10,272	0.795	8,166	92	0	
Age-Eligible Women:		57,261		45,522	4,859	141	0.110
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	5,578	0.795	4,435	169	2	
20 to 24	0.634	11,257	0.795	8,949	1,047	27	
25 to 29	0.693	12,908	0.795	10,262	1,570	40	
30 to 34	0.727	14,414	0.795	11,459	1,323	22	
35 to 39	0.729	16,346	0.795	12,995	653	5	
40 to 44	0.715	15,962	0.795	12,690	141	0	
Age-Eligible Women:		76,465		60,790	4,903	97	0.082

**Table D2. Physician's Office Model: Estimated Sample Size of Women for Three-Year Recruitment Period of All Women with 60% Initial Enrollment Rate**

Recruitment Period: 3 Years (all births by 39 months)					Women Recruited: ALL		
Estimated Initial Enrollment Rate: 60%					Distribution of Age-Eligible Women by Age Group:		
Number of Women Targeted:		410,722			Age Groups		Sampled Population
Unit Occupation Rate:		1			15 to 19		61,990
Contact Rate:		0.95			20 to 24		75,977
Age-Eligible Women Rate:		1			25 to 29		78,250
Age-Eligible Women:		390,186			30 to 34		71,968
Number of Enrolled 1st Live Births		95,080			35 to 39		58,870
Number of Enrolled 2nd Live Births		4,920			40 to 44		43,131
Total Enrolled Live Births		100,000			Total		390,186
Currently Pregnant (at enrollment, through 29 months)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	24,185	0.65	15,720	8,223	190	
20 to 24	0.1036	45,525	0.65	29,591	18,921	1336	
25 to 29	0.10329	46,261	0.65	30,070	20,694	1524	
30 to 34	0.07736	36,927	0.65	24,002	17,039	904	
35 to 39	0.0354	19,022	0.65	12,364	8,845	255	
40 to 44	0.00782	4,313	0.65	2,803	2,053	18	
Age-Eligible Women:		176,232		114,551	75,774	4,226	0.698
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	1,373	0.65	893	279	7	
20 to 24	0.0340	4,730	0.65	3,075	1,327	97	
25 to 29	0.0610	8,411	0.65	5,467	2,617	176	
30 to 34	0.0620	9,249	0.65	6,012	2,894	133	
35 to 39	0.0460	7,747	0.65	5,036	1,854	40	
40 to 44	0.0220	3,767	0.65	2,448	571	3	
Age-Eligible Women:		35,278		22,930	9,544	456	0.436
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	28,978	0.595	17,242	1,277	15	
20 to 24	0.2284	10,681	0.595	6,355	1,857	74	
25 to 29	0.1427	6,331	0.595	3,767	808	36	
30 to 34	0.1336	6,533	0.595	3,887	520	12	
35 to 39	0.1896	10,261	0.595	6,105	305	3	
40 to 44	0.2552	13,725	0.595	8,166	92	0	
Age-Eligible Women:		76,508		45,522	4,859	141	0.110
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.298	7,453	0.595	4,435	169	2	
20 to 24	0.634	15,041	0.595	8,949	1,047	27	
25 to 29	0.693	17,247	0.595	10,262	1,570	40	
30 to 34	0.727	19,259	0.595	11,459	1,323	22	
35 to 39	0.729	21,840	0.595	12,995	653	5	
40 to 44	0.715	21,327	0.595	12,690	141	0	
Age-Eligible Women:		102,168		60,790	4,903	97	0.082

**Table D3. Physician's Office Model: Estimated Sample Size of Women for Four-Year Recruitment Period of All Women with 80% Initial Enrollment Rate**

<b>Recruitment Period:</b> 4 Years (all births by 51 months)					<b>Women Recruited: ALL</b>		
<b>Estimated Initial Enrollment Rate:</b> 80%					Distribution of Age-Eligible Women by Age Group:		
Number of Women Targeted: 251,324					Age Groups		
Unit Occupation Rate: 1					15 to 19		
Contact Rate: 0.95					20 to 24		
Age-Eligible Women Rate: 1					25 to 29		
Age-Eligible Women: 238,758					30 to 34		
Number of Enrolled 1st Live Births 91,800					35 to 39		
Number of Enrolled 2nd Live Births 8,200					40 to 44		
Total Enrolled Live Births 100,000					Total		
238,758							
<b>Currently Pregnant (at enrollment, through 41 months)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	17,588	0.85	14,949	7,866	265	
20 to 24	0.1036	33,107	0.85	28,141	18,321	1993	
25 to 29	0.10329	33,642	0.85	28,596	20,118	2408	
30 to 34	0.07736	26,854	0.85	22,826	16,521	1511	
35 to 39	0.0354	13,833	0.85	11,758	8,540	450	
40 to 44	0.00782	3,136	0.85	2,666	1,973	35	
Age-Eligible Women:		128,160		108,936	73,338	6,662	0.734
<b>Currently Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	930	0.85	790	251	11	
20 to 24	0.0340	3,203	0.85	2,722	1,229	162	
25 to 29	0.0610	5,695	0.85	4,841	2,473	343	
30 to 34	0.0620	6,262	0.85	5,323	2,771	308	
35 to 39	0.0460	5,246	0.85	4,459	1,780	105	
40 to 44	0.0220	2,550	0.85	2,168	558	10	
Age-Eligible Women:		23,886		20,303	9,061	939	0.493
<b>Not on Contraception/Not Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	14,374	0.795	11,428	1,131	32	
20 to 24	0.2284	5,298	0.795	4,212	1,861	177	
25 to 29	0.1427	3,140	0.795	2,497	775	86	
30 to 34	0.1336	3,241	0.795	2,576	505	32	
35 to 39	0.1896	5,090	0.795	4,046	296	9	
40 to 44	0.2552	6,808	0.795	5,412	95	1	
Age-Eligible Women:		37,951		30,171	4,662	338	0.166
<b>Current Contraceptive Users (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.298	3,557	0.795	2,828	136	3	
20 to 24	0.634	7,178	0.795	5,707	974	62	
25 to 29	0.693	8,232	0.795	6,544	1,508	109	
30 to 34	0.727	9,192	0.795	7,308	1,298	68	
35 to 39	0.729	10,424	0.795	8,287	668	18	
40 to 44	0.715	10,179	0.795	8,092	154	1	
Age-Eligible Women:		48,762		38,765	4,739	261	0.129

**Table D4. Physician's Office Model: Estimated Sample Size of Women for Four-Year Recruitment Period of All Women with 60% Initial Enrollment Rate**

<b>Recruitment Period:</b>		4 Years (all births by 51 months)		<b>Women Recruited: ALL</b>			
<b>Estimated Initial Enrollment Rate:</b>		60%		Distribution of Age-Eligible Women by Age Group:			
Number of Women Targeted:		331,251					
Unit Occupation Rate:		1					
Contact Rate:		0.95					
Age-Eligible Women Rate:		1					
Age-Eligible Women:		314,688					
Number of Enrolled 1st Live Births		91,800					
Number of Enrolled 2nd Live Births		8,200					
Total Enrolled Live Births		100,000					
<b>Currently Pregnant (at enrollment, through 41 months)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	22,999	0.65	14,949	7,866	265	
20 to 24	0.1036	43,294	0.65	28,141	18,321	1993	
25 to 29	0.10329	43,993	0.65	28,596	20,118	2408	
30 to 34	0.07736	35,117	0.65	22,826	16,521	1511	
35 to 39	0.0354	18,089	0.65	11,758	8,540	450	
40 to 44	0.00782	4,101	0.65	2,666	1,973	35	
Age-Eligible Women:		167,594		108,936	73,338	6,662	0.734
<b>Currently Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	1,216	0.65	790	251	11	
20 to 24	0.0340	4,188	0.65	2,722	1,229	162	
25 to 29	0.0610	7,447	0.65	4,841	2,473	343	
30 to 34	0.0620	8,189	0.65	5,323	2,771	308	
35 to 39	0.0460	6,860	0.65	4,459	1,780	105	
40 to 44	0.0220	3,335	0.65	2,168	558	10	
Age-Eligible Women:		31,235		20,303	9,061	939	0.493
<b>Not on Contraception/Not Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	19,206	0.595	11,428	1,131	32	
20 to 24	0.2284	7,079	0.595	4,212	1,861	177	
25 to 29	0.1427	4,196	0.595	2,497	775	86	
30 to 34	0.1336	4,330	0.595	2,576	505	32	
35 to 39	0.1896	6,800	0.595	4,046	296	9	
40 to 44	0.2552	9,096	0.595	5,412	95	1	
Age-Eligible Women:		50,707		30,171	4,662	338	0.166
<b>Current Contraceptive Users (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.298	4,753	0.595	2,828	136	3	
20 to 24	0.634	9,591	0.595	5,707	974	62	
25 to 29	0.693	10,999	0.595	6,544	1,508	109	
30 to 34	0.727	12,282	0.595	7,308	1,298	68	
35 to 39	0.729	13,927	0.595	8,287	668	18	
40 to 44	0.715	13,600	0.595	8,092	154	1	
Age-Eligible Women:		65,152		38,765	4,739	261	0.129

**Table D5. Physician's Office Model: Estimated Sample Size of Women for Five-Year Recruitment Period of All Women with 80% Initial Enrollment Rate**

<b>Recruitment Period:</b>		5 Years (all births by 63 months)		<b>Women Recruited: ALL</b>			
<b>Estimated Initial Enrollment Rate:</b>		80%		Distribution of Age-Eligible Women by Age Group:			
Number of Women Targeted:		240,222					
Unit Occupation Rate:		1					
Contact Rate:		0.95					
Age-Eligible Women Rate:		1					
Age-Eligible Women:		228,211					
Number of Enrolled 1st Live Births		88,851					
Number of Enrolled 2nd Live Births		11,149					
Total Enrolled Live Births		100,000					
<b>Currently Pregnant (at enrollment, through 53 months)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	16,810	0.85	14,288	7,547	308	
20 to 24	0.1036	31,643	0.85	26,896	17,766	2522	
25 to 29	0.10329	32,154	0.85	27,331	19,594	3215	
30 to 34	0.07736	25,666	0.85	21,816	16,064	2100	
35 to 39	0.0354	13,221	0.85	11,238	8,274	651	
40 to 44	0.00782	2,997	0.85	2,548	1,903	56	
Age-Eligible Women:		122,492		104,118	71,149	8,851	0.768
<b>Currently Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	849	0.85	722	230	11	
20 to 24	0.0340	2,924	0.85	2,486	1,154	198	
25 to 29	0.0610	5,200	0.85	4,420	2,359	466	
30 to 34	0.0620	5,718	0.85	4,860	2,674	465	
35 to 39	0.0460	4,790	0.85	4,071	1,715	173	
40 to 44	0.0220	2,329	0.85	1,979	536	18	
Age-Eligible Women:		21,809		18,538	8,668	1,332	0.539
<b>Not on Contraception/Not Seeking Pregnancy (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	5,800	0.795	4,611	948	36	
20 to 24	0.2284	2,138	0.795	1,699	1,896	283	
25 to 29	0.1427	1,267	0.795	1,007	762	142	
30 to 34	0.1336	1,308	0.795	1,040	485	55	
35 to 39	0.1896	2,054	0.795	1,633	281	16	
40 to 44	0.2552	2,747	0.795	2,184	95	2	
Age-Eligible Women:		15,313		12,174	4,467	533	0.411
<b>Current Contraceptive Users (at enrollment)</b>							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.298	5,004	0.795	3,978	110	3	
20 to 24	0.634	10,098	0.795	8,028	907	90	
25 to 29	0.693	11,580	0.795	9,206	1,450	178	
30 to 34	0.727	12,931	0.795	10,280	1,268	123	
35 to 39	0.729	14,664	0.795	11,658	670	36	
40 to 44	0.715	14,319	0.795	11,384	163	3	
Age-Eligible Women:		68,596		54,534	4,568	432	0.092

**Table D6. Physician's Office Model: Estimated Sample Size of Women for Five-Year Recruitment Period of All Women with 60% Initial Enrollment Rate**

Recruitment Period:			5 Years (all births by 63 months)			Women Recruited: ALL	
Estimated Initial Enrollment Rate:			60%		Distribution of Age-Eligible Women by Age Group:		
Number of Women Targeted:			316,648		Age Groups		Sampled Population
Unit Occupation Rate:			1		15 to 19		37,528
Contact Rate:			0.95		20 to 24		61,552
Age-Eligible Women Rate:			1		25 to 29		66,013
Age-Eligible Women:			300,816		30 to 34		60,065
Number of Enrolled 1st Live Births			88,851		35 to 39		45,889
Number of Enrolled 2nd Live Births			11,149		40 to 44		29,768
Total Enrolled Live Births			100,000		Total		300,816
Currently Pregnant (at enrollment, through 53 months)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	21,982	0.65	14,288	7,547	308	
20 to 24	0.1036	41,379	0.65	26,896	17,766	2522	
25 to 29	0.10329	42,048	0.65	27,331	19,594	3215	
30 to 34	0.07736	33,564	0.65	21,816	16,064	2100	
35 to 39	0.0354	17,289	0.65	11,238	8,274	651	
40 to 44	0.00782	3,920	0.65	2,548	1,903	56	
Age-Eligible Women:		160,182		104,118	71,149	8,851	0.768
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	1,110	0.65	722	230	11	
20 to 24	0.0340	3,824	0.65	2,486	1,154	198	
25 to 29	0.0610	6,800	0.65	4,420	2,359	466	
30 to 34	0.0620	7,477	0.65	4,860	2,674	465	
35 to 39	0.0460	6,263	0.65	4,071	1,715	173	
40 to 44	0.0220	3,045	0.65	1,979	536	18	
Age-Eligible Women:		28,520		18,538	8,668	1,332	0.539
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	7,750	0.595	4,611	948	36	
20 to 24	0.2284	2,856	0.595	1,699	1,896	283	
25 to 29	0.1427	1,693	0.595	1,007	762	142	
30 to 34	0.1336	1,747	0.595	1,040	485	55	
35 to 39	0.1896	2,744	0.595	1,633	281	16	
40 to 44	0.2552	3,670	0.595	2,184	95	2	
Age-Eligible Women:		20,460		12,174	4,467	533	0.411
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	6,686	0.595	3,978	110	3	
20 to 24	0.634	13,493	0.595	8,028	907	90	
25 to 29	0.693	15,472	0.595	9,206	1,450	178	
30 to 34	0.727	17,277	0.595	10,280	1,268	123	
35 to 39	0.729	19,593	0.595	11,658	670	36	
40 to 44	0.715	19,133	0.595	11,384	163	3	
Age-Eligible Women:		91,654		54,534	4,568	432	0.092

## **APPENDIX E**

### **DETAILED OUTPUT OF PROBABILISTIC MODELS FOR PHYSICIAN'S OFFICE RECRUITMENT MODEL OF CURRENTLY PREGNANT WOMEN AND WOMEN SEEKING PREGNANCY (Prior to Applying Correction Factors)**

#### **Distribution of Live Births by Pregnancy/Contraception Status:**

**80% Currently Pregnant**  
**20% Seeking Pregnancy**



**Table E1. Physician's Office Model: Estimated Sample Size of Women for Three-Year Recruitment Period of CP/CSP Women with 80% Initial Enrollment Rate**

Recruitment Period:			3 Years (all births by 39 months)			Women Recruited: CP/CSP	
Estimated Initial Enrollment Rate:			85%		Distribution of Age-Eligible Women by Age Group:		
Number of Women Targeted:			198,653		Age Groups		Sampled Population
Unit Occupation Rate:			1		15 to 19		20,595
Contact Rate:			0.95		20 to 24		42,048
Age-Eligible Women Rate:			1		25 to 29		48,240
Age-Eligible Women:			188,720		30 to 34		42,384
Number of Enrolled 1st Live Births			94,862		35 to 39		26,395
Number of Enrolled 2nd Live Births			5,138		40 to 44		9,059
Total Enrolled Live Births			100,000		Total		188,720
Currently Pregnant (at enrollment, through 29 months)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	18,494	0.85	15,720	8,223	190	
20 to 24	0.1036	34,813	0.85	29,591	18,921	1336	
25 to 29	0.10329	35,376	0.85	30,070	20,694	1524	
30 to 34	0.07736	28,238	0.85	24,002	17,039	904	
35 to 39	0.0354	14,546	0.85	12,364	8,845	255	
40 to 44	0.00782	3,298	0.85	2,803	2,053	18	
Age-Eligible Women:		134,766		114,551	75,774	4,226	0.698
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	2,101	0.85	1,786	558	14	
20 to 24	0.0340	7,235	0.85	6,150	2,655	193	
25 to 29	0.0610	12,863	0.85	10,934	5,235	352	
30 to 34	0.0620	14,145	0.85	12,024	5,789	267	
35 to 39	0.0460	11,849	0.85	10,072	3,708	80	
40 to 44	0.0220	5,761	0.85	4,897	1,143	6	
Age-Eligible Women:		53,954		45,861	19,088	912	0.436
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	0	0.0	0	0	0	n/a
20 to 24	0.2284	0	0.0	0	0	0	n/a
25 to 29	0.1427	0	0.0	0	0	0	n/a
30 to 34	0.1336	0	0.0	0	0	0	n/a
35 to 39	0.1896	0	0.0	0	0	0	n/a
40 to 44	0.2552	0	0.0	0	0	0	n/a
Age-Eligible Women:		-		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	0	0.0	0	0	0	n/a
20 to 24	0.634	0	0.0	0	0	0	n/a
25 to 29	0.693	0	0.0	0	0	0	n/a
30 to 34	0.727	0	0.0	0	0	0	n/a
35 to 39	0.729	0	0.0	0	0	0	n/a
40 to 44	0.715	0	0.0	0	0	0	n/a
Age-Eligible Women:		-		-	-	-	



**Table E2. Physician's Office Model: Estimated Sample Size of Women for Three-Year Recruitment Period of CP/CSP Women with 60% Initial Enrollment Rate**

Recruitment Period:			3 Years (all births by 39 months)			Women Recruited: CP/CSP	
Estimated Initial Enrollment Rate:			65%		Distribution of Age-Eligible Women by Age Group:		
Number of Women Targeted:			259,776		Age Groups		Sampled Population
Unit Occupation Rate:			1		15 to 19		26,932
Contact Rate:			0.95		20 to 24		54,986
Age-Eligible Women Rate:			1		25 to 29		63,083
Age-Eligible Women:			246,788		30 to 34		55,425
Number of Enrolled 1st Live Births			94,862		35 to 39		34,517
Number of Enrolled 2nd Live Births			5,138		40 to 44		11,846
Total Enrolled Live Births			100,000		Total		246,788
Currently Pregnant (at enrollment, through 29 months)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	24,185	0.65	15,720	8,223	190	
20 to 24	0.1036	45,525	0.65	29,591	18,921	1336	
25 to 29	0.10329	46,261	0.65	30,070	20,694	1524	
30 to 34	0.07736	36,927	0.65	24,002	17,039	904	
35 to 39	0.0354	19,022	0.65	12,364	8,845	255	
40 to 44	0.00782	4,313	0.65	2,803	2,053	18	
Age-Eligible Women:		176,232		114,551	75,774	4,226	0.698
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	2,747	0.65	1,786	558	14	
20 to 24	0.0340	9,461	0.65	6,150	2,655	193	
25 to 29	0.0610	16,821	0.65	10,934	5,235	352	
30 to 34	0.0620	18,498	0.65	12,024	5,789	267	
35 to 39	0.0460	15,495	0.65	10,072	3,708	80	
40 to 44	0.0220	7,533	0.65	4,897	1,143	6	
Age-Eligible Women:		70,555		45,861	19,088	912	0.436
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	0	0.0	0	0	0	n/a
20 to 24	0.2284	0	0.0	0	0	0	n/a
25 to 29	0.1427	0	0.0	0	0	0	n/a
30 to 34	0.1336	0	0.0	0	0	0	n/a
35 to 39	0.1896	0	0.0	0	0	0	n/a
40 to 44	0.2552	0	0.0	0	0	0	n/a
Age-Eligible Women:		-		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	0	0.0	0	0	0	n/a
20 to 24	0.634	0	0.0	0	0	0	n/a
25 to 29	0.693	0	0.0	0	0	0	n/a
30 to 34	0.727	0	0.0	0	0	0	n/a
35 to 39	0.729	0	0.0	0	0	0	n/a
40 to 44	0.715	0	0.0	0	0	0	n/a
Age-Eligible Women:		-		-	-	-	

**Table E3. Physician's Office Model: Estimated Sample Size of Women for Four-Year Recruitment Period of CP/CSP Women with 80% Initial Enrollment Rate**

Recruitment Period:		4 Years (all births by 51 months)			Women Recruited: CP/CSP																		
Estimated Initial Enrollment Rate:		85%			Distribution of Age-Eligible Women by Age Group:																		
Number of Women Targeted:		185,191			<table><tr><td>Age Groups</td><td>Sampled Population</td></tr><tr><td>15 to 19</td><td>19,448</td></tr><tr><td>20 to 24</td><td>39,513</td></tr><tr><td>25 to 29</td><td>45,031</td></tr><tr><td>30 to 34</td><td>39,378</td></tr><tr><td>35 to 39</td><td>24,324</td></tr><tr><td>40 to 44</td><td>8,237</td></tr><tr><td>Total</td><td>175,932</td></tr></table>			Age Groups	Sampled Population	15 to 19	19,448	20 to 24	39,513	25 to 29	45,031	30 to 34	39,378	35 to 39	24,324	40 to 44	8,237	Total	175,932
Age Groups	Sampled Population																						
15 to 19	19,448																						
20 to 24	39,513																						
25 to 29	45,031																						
30 to 34	39,378																						
35 to 39	24,324																						
40 to 44	8,237																						
Total	175,932																						
Unit Occupation Rate:		1																					
Contact Rate:		0.95																					
Age-Eligible Women Rate:		1																					
Age-Eligible Women:		175,932																					
Number of Enrolled 1st Live Births		91,460																					
Number of Enrolled 2nd Live Births		8,540																					
Total Enrolled Live Births		100,000																					
Currently Pregnant (at enrollment, through 41 months)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.05349	17,588	0.85	14,949	7,866	265																	
20 to 24	0.1036	33,107	0.85	28,141	18,321	1993																	
25 to 29	0.10329	33,642	0.85	28,596	20,118	2408																	
30 to 34	0.07736	26,854	0.85	22,826	16,521	1511																	
35 to 39	0.0354	13,833	0.85	11,758	8,540	450																	
40 to 44	0.00782	3,136	0.85	2,666	1,973	35																	
Age-Eligible Women:		128,160		108,936	73,338	6,662	0.734																
Currently Seeking Pregnancy (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.0090	1,860	0.85	1,581	501	21																	
20 to 24	0.0340	6,406	0.85	5,445	2,458	324																	
25 to 29	0.0610	11,389	0.85	9,681	4,946	686																	
30 to 34	0.0620	12,525	0.85	10,646	5,541	617																	
35 to 39	0.0460	10,491	0.85	8,918	3,561	211																	
40 to 44	0.0220	5,101	0.85	4,336	1,115	19																	
Age-Eligible Women:		47,772		40,606	18,122	1,878	0.493																
Not on Contraception/Not Seeking Pregnancy (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.6395	0	0.0	0	0	0	n/a																
20 to 24	0.2284	0	0.0	0	0	0	n/a																
25 to 29	0.1427	0	0.0	0	0	0	n/a																
30 to 34	0.1336	0	0.0	0	0	0	n/a																
35 to 39	0.1896	0	0.0	0	0	0	n/a																
40 to 44	0.2552	0	0.0	0	0	0	n/a																
Age-Eligible Women:		-		-	-	-																	
Current Contraceptive Users (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.298	0	0.0	0	0	0	n/a																
20 to 24	0.634	0	0.0	0	0	0	n/a																
25 to 29	0.693	0	0.0	0	0	0	n/a																
30 to 34	0.727	0	0.0	0	0	0	n/a																
35 to 39	0.729	0	0.0	0	0	0	n/a																
40 to 44	0.715	0	0.0	0	0	0	n/a																
Age-Eligible Women:		-		-	-	-																	

**Table E4. Physician's Office Model: Estimated Sample Size of Women for Four-Year Recruitment Period of CP/CSP Women with 60% Initial Enrollment Rate**

Recruitment Period:		4 Years (all births by 51 months)			Women Recruited: CP/CSP																		
Estimated Initial Enrollment Rate:		65%			Distribution of Age-Eligible Women by Age Group:																		
Number of Women Targeted:		242,173			<table><tr><td>Age Groups</td><td>Sampled Population</td></tr><tr><td>15 to 19</td><td>25,431</td></tr><tr><td>20 to 24</td><td>51,670</td></tr><tr><td>25 to 29</td><td>58,887</td></tr><tr><td>30 to 34</td><td>51,495</td></tr><tr><td>35 to 39</td><td>31,809</td></tr><tr><td>40 to 44</td><td>10,771</td></tr><tr><td>Total</td><td>230,064</td></tr></table>			Age Groups	Sampled Population	15 to 19	25,431	20 to 24	51,670	25 to 29	58,887	30 to 34	51,495	35 to 39	31,809	40 to 44	10,771	Total	230,064
Age Groups	Sampled Population																						
15 to 19	25,431																						
20 to 24	51,670																						
25 to 29	58,887																						
30 to 34	51,495																						
35 to 39	31,809																						
40 to 44	10,771																						
Total	230,064																						
Unit Occupation Rate:		1																					
Contact Rate:		0.95																					
Age-Eligible Women Rate:		1																					
Age-Eligible Women:		230,064																					
Number of Enrolled 1st Live Births		91,460																					
Number of Enrolled 2nd Live Births		8,540																					
Total Enrolled Live Births		100,000																					
Currently Pregnant (at enrollment, through 41 months)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.05349	22,999	0.65	14,949	7,866	265																	
20 to 24	0.1036	43,294	0.65	28,141	18,321	1993																	
25 to 29	0.10329	43,993	0.65	28,596	20,118	2408																	
30 to 34	0.07736	35,117	0.65	22,826	16,521	1511																	
35 to 39	0.0354	18,089	0.65	11,758	8,540	450																	
40 to 44	0.00782	4,101	0.65	2,666	1,973	35																	
Age-Eligible Women:		167,594		108,936	73,338	6,662	0.734																
Currently Seeking Pregnancy (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.0090	2,432	0.65	1,581	501	21																	
20 to 24	0.0340	8,377	0.65	5,445	2,458	324																	
25 to 29	0.0610	14,894	0.65	9,681	4,946	686																	
30 to 34	0.0620	16,378	0.65	10,646	5,541	617																	
35 to 39	0.0460	13,719	0.65	8,918	3,561	211																	
40 to 44	0.0220	6,670	0.65	4,336	1,115	19																	
Age-Eligible Women:		62,471		40,606	18,122	1,878	0.493																
Not on Contraception/Not Seeking Pregnancy (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.6395	0	0.0	0	0	0	n/a																
20 to 24	0.2284	0	0.0	0	0	0	n/a																
25 to 29	0.1427	0	0.0	0	0	0	n/a																
30 to 34	0.1336	0	0.0	0	0	0	n/a																
35 to 39	0.1896	0	0.0	0	0	0	n/a																
40 to 44	0.2552	0	0.0	0	0	0	n/a																
Age-Eligible Women:		-		-	-	-																	
Current Contraceptive Users (at enrollment)																							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman																
15 to 19	0.298	0	0.0	0	0	0	n/a																
20 to 24	0.634	0	0.0	0	0	0	n/a																
25 to 29	0.693	0	0.0	0	0	0	n/a																
30 to 34	0.727	0	0.0	0	0	0	n/a																
35 to 39	0.729	0	0.0	0	0	0	n/a																
40 to 44	0.715	0	0.0	0	0	0	n/a																
Age-Eligible Women:		-		-	-	-																	

**Table E5. Physician's Office Model: Estimated Sample Size of Women for Five-Year Recruitment Period of CP/CSP Women with 80% Initial Enrollment Rate**

Recruitment Period:			5 Years (all births by 63 months)			Women Recruited: CP/CSP	
Estimated Initial Enrollment Rate:			85%		Distribution of Age-Eligible Women by Age Group:		
Number of Women Targeted:			174,853		Age Groups		Sampled Population
Unit Occupation Rate:			1		15 to 19		18,508
Contact Rate:			0.95		20 to 24		37,492
Age-Eligible Women Rate:			1		25 to 29		42,554
Age-Eligible Women:			166,111		30 to 34		37,102
Number of Enrolled 1st Live Births			88,484		35 to 39		22,801
Number of Enrolled 2nd Live Births			11,516		40 to 44		7,655
Total Enrolled Live Births			100,000		Total		166,111
Currently Pregnant (at enrollment, through 53 months)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	16,810	0.85	14,288	7,547	308	
20 to 24	0.1036	31,643	0.85	26,896	17,766	2522	
25 to 29	0.10329	32,154	0.85	27,331	19,594	3215	
30 to 34	0.07736	25,666	0.85	21,816	16,064	2100	
35 to 39	0.0354	13,221	0.85	11,238	8,274	651	
40 to 44	0.00782	2,997	0.85	2,548	1,903	56	
Age-Eligible Women:		122,492		104,118	71,149	8,851	0.768
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	1,698	0.85	1,443	460	22	
20 to 24	0.0340	5,849	0.85	4,972	2,309	397	
25 to 29	0.0610	10,399	0.85	8,839	4,718	933	
30 to 34	0.0620	11,436	0.85	9,720	5,347	931	
35 to 39	0.0460	9,579	0.85	8,142	3,429	346	
40 to 44	0.0220	4,657	0.85	3,959	1,073	36	
Age-Eligible Women:		43,619		37,076	17,336	2,664	0.539
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	0	0.0	0	0	0	n/a
20 to 24	0.2284	0	0.0	0	0	0	n/a
25 to 29	0.1427	0	0.0	0	0	0	n/a
30 to 34	0.1336	0	0.0	0	0	0	n/a
35 to 39	0.1896	0	0.0	0	0	0	n/a
40 to 44	0.2552	0	0.0	0	0	0	n/a
Age-Eligible Women:		-		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	0	0.0	0	0	0	n/a
20 to 24	0.634	0	0.0	0	0	0	n/a
25 to 29	0.693	0	0.0	0	0	0	n/a
30 to 34	0.727	0	0.0	0	0	0	n/a
35 to 39	0.729	0	0.0	0	0	0	n/a
40 to 44	0.715	0	0.0	0	0	0	n/a
Age-Eligible Women:		-		-	-	-	

**Table E6. Physician's Office Model: Estimated Sample Size of Women for Five-Year Recruitment Period of CP/CSP Women with 60% Initial Enrollment Rate**

Recruitment Period:			5 Years (all births by 63 months)			Women Recruited: CP/CSP	
Estimated Initial Enrollment Rate:			65%		Distribution of Age-Eligible Women by Age Group:		
Number of Women Targeted:			228,654		Age Groups		Sampled Population
Unit Occupation Rate:			1		15 to 19		24,203
Contact Rate:			0.95		20 to 24		49,028
Age-Eligible Women Rate:			1		25 to 29		55,647
Age-Eligible Women:			217,222		30 to 34		48,518
Number of Enrolled 1st Live Births			88,484		35 to 39		29,816
Number of Enrolled 2nd Live Births			11,516		40 to 44		10,010
Total Enrolled Live Births			100,000		Total		217,222
Currently Pregnant (at enrollment, through 53 months)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	21,982	0.65	14,288	7,547	308	
20 to 24	0.1036	41,379	0.65	26,896	17,766	2522	
25 to 29	0.10329	42,048	0.65	27,331	19,594	3215	
30 to 34	0.07736	33,564	0.65	21,816	16,064	2100	
35 to 39	0.0354	17,289	0.65	11,238	8,274	651	
40 to 44	0.00782	3,920	0.65	2,548	1,903	56	
Age-Eligible Women:		160,182		104,118	71,149	8,851	0.768
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	2,221	0.65	1,443	460	22	
20 to 24	0.0340	7,649	0.65	4,972	2,309	397	
25 to 29	0.0610	13,599	0.65	8,839	4,718	933	
30 to 34	0.0620	14,954	0.65	9,720	5,347	931	
35 to 39	0.0460	12,527	0.65	8,142	3,429	346	
40 to 44	0.0220	6,090	0.65	3,959	1,073	36	
Age-Eligible Women:		57,040		37,076	17,336	2,664	0.539
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	0	0.0	0	0	0	n/a
20 to 24	0.2284	0	0.0	0	0	0	n/a
25 to 29	0.1427	0	0.0	0	0	0	n/a
30 to 34	0.1336	0	0.0	0	0	0	n/a
35 to 39	0.1896	0	0.0	0	0	0	n/a
40 to 44	0.2552	0	0.0	0	0	0	n/a
Age-Eligible Women:		-		-	-	-	
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	0	0.0	0	0	0	n/a
20 to 24	0.634	0	0.0	0	0	0	n/a
25 to 29	0.693	0	0.0	0	0	0	n/a
30 to 34	0.727	0	0.0	0	0	0	n/a
35 to 39	0.729	0	0.0	0	0	0	n/a
40 to 44	0.715	0	0.0	0	0	0	n/a
Age-Eligible Women:		-		-	-	-	

## **APPENDIX F**

### **DETAILED OUTPUT OF TWO ALTERNATIVE PROBABILISTIC MODELS (Prior to Applying Correction Factors)**

**1. HOUSEHOLD RECRUITMENT MODEL OF ALL WOMEN WITH  
THE HIGHER-LEVEL INITIAL ENROLLMENT RATE FOR CP/CSP  
WOMEN (85 PERCENT) AND THE LOWER-LEVEL INITIAL  
ENROLLMENT RATE FOR CCU/OTHER WOMEN (59.5 PERCENT)**

**2. DRAFT FULL COMMUNITY MODEL OF ALL WOMEN – 50  
PERCENT RECRUITED USING HOUSEHOLD APPROACH AND 50  
PERCENT RECRUITED WITH PRIOR INFORMATION SIMILAR TO  
PHYSICIAN OFFICE APPROACH**

**Table F1. Household Model: Estimated Sample Size of Women for Three-Year Recruitment Period of All Women with 85% Initial Enrollment Rate for CP/CSP Women and 59.5% for CCU/Other Women**

Recruitment Period:			3 Years (all births by 39 months)			Women Recruited: ALL	
Estimated Initial Enrollment Rate:			Mix (85/60)		Distribution of Age-Eligible Women by Age Group:		
Number of Households Sampled:			2,020,569				
Unit Occupation Rate:			0.9		Age Groups		
Contact Rate:			0.95		15 to 19		
Age-Eligible Women Rate:			0.57		20 to 24		
Age-Eligible Women:			984,724		25 to 29		
Number of Enrolled 1st Live Births			94,714		30 to 34		
Number of Enrolled 2nd Live Births			5,286		35 to 39		
Total Enrolled Live Births			100,000		40 to 44		
					Total		
					984,724		
Currently Pregnant (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	8,206	0.85	6,975	3,694	156	
20 to 24	0.1036	15,447	0.85	13,130	8,667	1108	
25 to 29	0.10329	15,696	0.85	13,342	9,525	1284	
30 to 34	0.07736	12,529	0.85	10,650	7,802	781	
35 to 39	0.0354	6,454	0.85	5,486	4,026	224	
40 to 44	0.00782	1,463	0.85	1,244	928	16	
Age-Eligible Women:		59,795		50,826	34,641	3,570	0.752
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	1,481	0.85	1,259	394	10	
20 to 24	0.0340	5,102	0.85	4,336	1,872	136	
25 to 29	0.0610	9,071	0.85	7,710	3,691	249	
30 to 34	0.0620	9,975	0.85	8,478	4,082	188	
35 to 39	0.0460	8,355	0.85	7,102	2,615	56	
40 to 44	0.0220	4,062	0.85	3,453	806	4	
Age-Eligible Women:		38,045		32,338	13,460	643	0.436
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	98,833	0.595	58,806	4,357	52	
20 to 24	0.2284	36,427	0.595	21,674	6,334	253	
25 to 29	0.1427	21,593	0.595	12,848	2,754	124	
30 to 34	0.1336	22,281	0.595	13,257	1,773	41	
35 to 39	0.1896	34,995	0.595	20,822	1,040	10	
40 to 44	0.2552	46,809	0.595	27,852	313	1	
Age-Eligible Women:		260,939		155,258	16,571	482	0.110
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth	Enrolled LBs per Enrolled Woman
15 to 19	0.298	45,664	0.595	27,170	1,035	11	
20 to 24	0.634	92,148	0.595	54,828	6,417	162	
25 to 29	0.693	105,668	0.595	62,872	9,622	248	
30 to 34	0.727	117,994	0.595	70,207	8,104	136	
35 to 39	0.729	133,807	0.595	79,615	4,001	32	
40 to 44	0.715	130,664	0.595	77,745	862	2	
Age-Eligible Women:		625,945		372,437	30,042	592	0.082



**Table F2a. Full Community Model: Estimated Sample Size of Women for Four-Year Recruitment Period of All Women, 50% Obtained with Prior Information, 50% from a Household Sample**

Recruitment Period:				4 Years (all births by 51 months)		Women Recruited: ALL		
Estimated Initial Enrollment Rate:				90%/80%		Distribution of Age-Eligible Women by Age Group:		
Number of Households Sampled:				1,260,344		Age Groups		Sampled Population
Unit Occupation Rate:				1/9		15 to 19		93,977
Contact Rate:				0.95		20 to 24		90,893
Age-Eligible Women Rate:				1/.4		25 to 29		92,663
Age-Eligible Women:				600,202		30 to 34		99,216
Number of Enrolled 1st Live Births				91,575		35 to 39		111,913
Number of Enrolled 2nd Live Births				8,425		40 to 44		111,540
Total Enrolled Live Births				100,000		Total		600,202
Currently Pregnant (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth)	Enrolled LBs per Enrolled Woman	
15 to 19	0.05349	5,002	0.95/0.85	4,472	2,386	140		
20 to 24	0.1036	9,415	0.95/0.85	8417	5,714	1113		
25 to 29	0.10329	9,567	0.95/0.85	8553	6,331	1404		
30 to 34	0.07736	7,637	0.95/0.85	6828	5,168	916		
35 to 39	0.0354	3,934	0.95/0.85	3517	2,646	283		
40 to 44	0.00782	892	0.95/0.85	797	605	23		
Age-Eligible Women:		36,446		32,584	22,850	3,879	0.820	
Currently Seeking Pregnancy (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth)	Enrolled LBs per Enrolled Woman	
15 to 19	0.0090	903	0.95/0.85	807	256	11		
20 to 24	0.0340	3,110	0.95/0.85	2,780	1,254	164		
25 to 29	0.0610	5,529	0.95/0.85	4,943	2,523	347		
30 to 34	0.0620	6,080	0.95/0.85	5,435	2,826	312		
35 to 39	0.0460	5,093	0.95/0.85	4,553	1,816	106		
40 to 44	0.0220	2,476	0.95/0.85	2,214	569	10		
Age-Eligible Women:		23,189		20,732	9,244	950	0.492	
Not on Contraception/Not Seeking Pregnancy (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth)	Enrolled LBs per Enrolled Woman	
15 to 19	0.6395	60,240	0.895/0.795	50,544	4,988	139		
20 to 24	0.2284	22,203	0.895/0.795	18,629	8,188	773		
25 to 29	0.1427	13,161	0.895/0.795	11,043	3,413	377		
30 to 34	0.1336	13,581	0.895/0.795	11,395	2,223	141		
35 to 39	0.1896	21,330	0.895/0.795	17,897	1,302	38		
40 to 44	0.2552	28,531	0.895/0.795	23,938	420	3		
Age-Eligible Women:		159,045		133,445	20,532	1,472	0.165	
Current Contraceptive Users (at enrollment)								
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth)	Enrolled LBs per Enrolled Woman	
15 to 19	0.298	27,833	0.895/0.795	23,353	1,124	26		
20 to 24	0.634	56,165	0.895/0.795	47,125	8,006	504		
25 to 29	0.693	64,406	0.895/0.795	54,039	12,395	885		
30 to 34	0.727	71,919	0.895/0.795	60,343	10,668	553		
35 to 39	0.729	81,557	0.895/0.795	68,429	5,490	147		
40 to 44	0.715	79,641	0.895/0.795	66,822	1,266	9		
Age-Eligible Women:		381,521		320,111	38,949	2,124	0.128	



**Table F2b. Full Community Model: Estimated Sample Size of Women for Four-Year Recruitment Period of All Women, Results for 50% Obtained with Prior Information**

Recruitment Period:				4 Years (all births by 51 months)		Women Recruited: ALL				
Estimated Initial Enrollment Rate:				90%		Distribution of Age-Eligible Women by Age Group:				
Number of Households Sampled:				278,231		Age Groups		Sampled Population		
Unit Occupation Rate:				1		15 to 19		41,386		
Contact Rate:				0.95		20 to 24		40,028		
Age-Eligible Women Rate:				1		25 to 29		40,807		
Age-Eligible Women:				264,319		30 to 34		43,693		
Number of Enrolled 1st Live Births				45,345		35 to 39		49,285		
Number of Enrolled 2nd Live Births				4,655		40 to 44		49,120		
Total Enrolled Live Births				50,000		Total		264,319		
Currently Pregnant (at enrollment, Month 1 - Month 6)										
Age Groups		% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth)	Enrolled LBs per Enrolled Woman		
15 to 19		0.05349	2,203	0.95	2,092	1,118	69			
20 to 24		0.1036	4,146	0.95	3,939	2,691	566			
25 to 29		0.10329	4,213	0.95	4,003	2,988	729			
30 to 34		0.07736	3,363	0.95	3,195	2,438	482			
35 to 39		0.0354	1,732	0.95	1,646	1,246	151			
40 to 44		0.00782	393	0.95	373	284	13			
Age-Eligible Women:		16,050		15,248		10,766		2,010		0.838
Currently Seeking Pregnancy (at enrollment)										
Age Groups		% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth)	Enrolled LBs per Enrolled Woman		
15 to 19		0.0090	398	0.95	378	120	5			
20 to 24		0.0340	1,369	0.95	1,301	592	85			
25 to 29		0.0610	2,435	0.95	2,313	1,197	185			
30 to 34		0.0620	2,677	0.95	2,543	1,345	171			
35 to 39		0.0460	2,243	0.95	2,131	864	60			
40 to 44		0.0220	1,090	0.95	1,036	271	6			
Age-Eligible Women:		10,212		9,701		4,389		512		0.505
Not on Contraception/Not Seeking Pregnancy (at enrollment)										
Age Groups		% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth)	Enrolled LBs per Enrolled Woman		
15 to 19		0.6395	26,529	0.895	23,743	2,458	78			
20 to 24		0.2284	9,778	0.895	8,751	4,199	454			
25 to 29		0.1427	5,796	0.895	5,187	1,733	222			
30 to 34		0.1336	5,981	0.895	5,353	1,126	84			
35 to 39		0.1896	9,393	0.895	8,407	658	23			
40 to 44		0.2552	12,565	0.895	11,245	215	2			
Age-Eligible Women:		70,041		62,687		10,389		863		0.179
Current Contraceptive Users (at enrollment)										
Age Groups		% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth)	Enrolled LBs per Enrolled Woman		
15 to 19		0.298	12,257	0.895	10,970	547	14			
20 to 24		0.634	24,734	0.895	22,137	4,035	292			
25 to 29		0.693	28,363	0.895	25,385	6,295	528			
30 to 34		0.727	31,672	0.895	28,346	5,441	337			
35 to 39		0.729	35,916	0.895	32,145	2,822	92			
40 to 44		0.715	35,073	0.895	31,390	660	6			
Age-Eligible Women:		168,016		150,374		19,802		1,269		0.140

**Table F2c. Full Community Model: Estimated Sample Size of Women for Four-Year Recruitment Period of All Women, Results for 50% Obtained from Household Sample**

Recruitment Period:		4 Years (all births by 51 months)			Women Recruited: ALL		
Estimated Initial Enrollment Rate:		80%		Distribution of Age-Eligible Women by Age Group:			
Number of Households Sampled:		982,113		Age Groups		Sampled Population	
Unit Occupation Rate:		0.9		15 to 19		52,591	
Contact Rate:		0.95		20 to 24		50,865	
Age-Eligible Women Rate:		0.4		25 to 29		51,856	
Age-Eligible Women:		335,883		30 to 34		55,523	
Number of Enrolled 1st Live Births		46,230		35 to 39		62,628	
Number of Enrolled 2nd Live Births		3,770		40 to 44		62,420	
Total Enrolled Live Births		50,000		Total		335,883	
Currently Pregnant (at enrollment, Month 7 - Month 12)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Initial Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.05349	2,799	0.85	2,379	1,268	71	
20 to 24	0.1036	5,269	0.85	4,478	3,023	546	
25 to 29	0.10329	5,354	0.85	4,551	3,342	675	
30 to 34	0.07736	4,274	0.85	3,633	2,730	434	
35 to 39	0.0354	2,201	0.85	1,871	1,400	132	
40 to 44	0.00782	499	0.85	424	321	11	
Age-Eligible Women:		20,396		17,336	12,084	1,869	0.805
Currently Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.0090	505	0.85	429	136	5	
20 to 24	0.0340	1,740	0.85	1,479	662	79	
25 to 29	0.0610	3,094	0.85	2,630	1,326	162	
30 to 34	0.0620	3,402	0.85	2,892	1,481	140	
35 to 39	0.0460	2,850	0.85	2,422	952	46	
40 to 44	0.0220	1,386	0.85	1,178	298	4	
Age-Eligible Women:		12,977		11,030	4,856	438	0.480
Not on Contraception/Not Seeking Pregnancy (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.6395	33,711	0.795	26,801	2,529	61	
20 to 24	0.2284	12,425	0.795	9,878	3,989	320	
25 to 29	0.1427	7,365	0.795	5,855	1,680	155	
30 to 34	0.1336	7,600	0.795	6,042	1,097	57	
35 to 39	0.1896	11,936	0.795	9,490	643	15	
40 to 44	0.2552	15,966	0.795	12,693	205	1	
Age-Eligible Women:		89,004		70,758	10,143	609	0.152
Current Contraceptive Users (at enrollment)							
Age Groups	% of Eligible Women in Age Group	# of Women Contacted	Init. Enrollment Rate	# of Women Enrolled	Enrolled Children: 1st Monitored Preg. (at birth age)	Enrolled Children: Subsequent Pregs. (at birth age)	Enrolled LBs per Enrolled Woman
15 to 19	0.298	15,576	0.795	12,383	577	12	
20 to 24	0.634	31,431	0.795	24,988	3,971	212	
25 to 29	0.693	36,043	0.795	28,654	6,100	357	
30 to 34	0.727	40,247	0.795	31,996	5,227	215	
35 to 39	0.729	45,641	0.795	36,284	2,667	55	
40 to 44	0.715	44,569	0.795	35,432	606	3	
Age-Eligible Women:		213,505		169,737	19,147	855	0.118